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ABSTRACT

This volume is the first of three reporting on The Study of Junior Colleges, a project of the UCLA Center for the Study of Evaluation and the U.S. Office of Education. Volume I, the review of the literature on junior colleges, is divided into 12 chapters focusing on 9 areas of interest: major administrative issues and problems, junior college students--a general survey, disadvantaged students and low achievers, relationships with the community, remedial programs, innovations in junior college education, vocational education programs, faculty, and counseling services. Each section presents a summary of known information and areas in need of research. Chapters are: Research for Development in the Community College; Who Passes Through the Open Door?; Keeping the Doors Open for Low Achievers; Salvaging the Talent of the Disadvantaged Student; Students Who Leave; Career Education; Preparing the Low Achiever to Enter the Curriculum; Relevance and Mastery Through Innovation; Counseling Diverse Students; Junior College Faculty: A New Breed in Higher Education; Administration: Defining Roles and Reality; and Defining Community Needs. (For related documents, see JC 730 147-149.) (KM)

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THE STUDY OF JUNIOR COLLEGES

Contract No. OEC-0-70-4795

VOLUME I ROLES AND REALITIES OF COMMUNITY COLLEGES: AN ANALYSIS OF THE LITERATURE

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Preface

The present volume is the first of three reporting on The Study of Junior Colleges undertaken in conjunction with the UCLA Center for the Study of Evaluation for the U.S. Office of Education. The project was initiated under the auspices of the Office of Education's National Center for Educational Statistics. It was designed to help close the gap that exists between data needs of policy-makers and available bodies of statistics on junior colleges. The primary purposes of the project were: (1) to ascertain major problems and needs articulated by leaders in the junior college, (2) to determine the availability and quality of data existing in the central records of junior colleges, (3) to identify other important descriptions that can only be obtained directly from students and staff, (4) to assist the Office of Education in determining what criteria should be used to measure and analyze the special needs and performances of junior colleges, and (5) to serve as a first step in the development of a national data bank on junior colleges.

The purpose of the data bank will be twofold: (1) to supply the information needed by administrator, educators, and researchers who are concerned with the evaluation and future development of the community junior college; (2) to provide data for the various federal, regional, and state agencies which are concerned with the problems of policy formation and program development in the junior colleges.

In order to meet its objectives, the project included the following activities:

- (1) Interviews with leaders and experts in the junior college field to obtain their assessment of the objectives, problems, needs, and processes important to the continued development of the junior college and to obtain their perceptions of the quantitative information needed to clarify and assist in dealing with these issues.
- (2) An analytical review of the literature on junior colleges to determine further the issues and variables relevant to the development and evaluation of junior colleges.
- (3) In-depth case studies of 15 different types of junior colleges to assess the dynamics of junior colleges and to determine those variables important to the understanding of these dynamics.

(4) The development, pretesting, and justification of a prototypic Junior College Supplement to the Higher Education General Information Survey (HEGIS) system.

(5) The development of a series of measurements and items contained in comprehensive prototypic survey instruments for use of future evaluation research on junior colleges.

The present Volume I contains the analytic review of the literature on junior colleges. Volume II contains the results of the case studies and concomitant surveys, and the administrative interviews; tables and other appendix materials related to Volume II are bound separately in Volume IIA: Technical Appendixes. The measurements and instrumentation derived from the project for future evaluation surveys comprise Volume III. The HEGIS Junior College Supplement has been submitted to the Office of Education separately.

The following staff members at UCLA were on the Advisory Committee for The Study of Junior Colleges and contributed to the initial implementation of the project: Arthur M. Cohen, Associate Professor of Higher Education; Principal Investigator and Director, ERIC Clearinghouse for Junior Colleges; Richard D. Howe, Assistant Executive Director, League for Innovation in the Community College; Director, UCLA junior College Leadership Program; and C. Robert Pace, Professor of Higher Education; Director, Higher Education Evaluation Program, Center for the Study of Evaluation.

Dr. John Lombardi of UCLA's ERIC Clearinghouse for Junior Colleges graciously contributed to the development of the project's interview schedule for administrators. He also chaired the "Santa Fe Revisited" conference which was sponsored by the project to obtain inputs from major leaders of the junior college movement who originally presented their ideas in a series of discussions at Santa Fe College under the coordination of Joseph Fordyce. The participants of this conference are also gratefully acknowledged.

William Keim, former Assistant Superintendent of Community Services, Cerritos College, and current Chairman of the Community Services Committee of the American Association of Junior Colleges, helped in the preparation of instrument items relating to community services. Jane Matson, Professor of Guidance and Counseling, California State University, Los Angeles, assisted The Study of Junior Colleges staff in the development of the counselor questionnaire as well as with the selection of case-study sites. In addition,

two project staff members visited the National Laboratory for Higher Education to discuss matters of sampling and survey techniques and selection of case-study schools with various NLHE staff, and in particular with John Roueche, who was at that time Director of the Junior and Community College Division.

A number of other agencies were likewise consulted, such as the ERIC Clearinghouse for Junior Colleges, UCLA, whose files were used extensively in preparing the literature review (a major determinant of items included in the survey forms) and the UCLA Survey Research Center which offered suggestions regarding sampling techniques, questionnaire construction, and survey procedures.

A number of experts in the field were most helpful in their review of the HEGIS supplement. These included Dorothy Knoell, Dennis J. Jones, Charles R. Walker, William Morsch, and Edmund Gleazer.

Outstanding supporting staff members included Barbara Vizents, Jan Newmark, Lenois Stovall, Vera Lawley, Janet Katano, Irene Chow, and, most particularly, Lenore Korchek. Jane C. Beer was most helpful in preparing the project's volumes for publication. Winston Doby and Robert Collins graciously assisted with the site visits. Richard Seligman, Associate Director of the UCLA Center for the Study of Evaluation, was most helpful in directing the Center's resources towards the successful completion of the project.

The extensive project could not have been completed without the exceptional talent and commitment of the research staff. These included Patrick Breslin, Barbara Dorf, Robert Fitch (who initiated the early coordination of the project), Ronald Hart, Janet Hoel, Roberta Malmgren, Ann Morey, and Clare Rose. Clarence Bradford and Ricardo Klorman were indispensable in their overseeing the data analyses. Ernest Scalberg was equally indispensable in his direction of the sub-project focussed on the development and pretesting of the HEGIS supplement. Above all, appreciation is extended to Michael Gaffney and Felice Karman who directed the project during its inevitably difficult and complex stages.

James W. Trent
Principal Investigator

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CHAPTER 1

RESEARCH FOR DEVELOPMENT IN THE COMMUNITY COLLEGE*

James W. Trent

*Major portions of this chapter were originally published in B. Lamar Johnson (Ed.), Toward Educational Development in the Community Junior College (Los Angeles: UCLA Junior College Leadership Program, Occasional Report No. 7, 1972).

The Challenge of the Community College

Past and present leaders of the two-year community college movement have reason to be proud. In the span of seventy years, they have formed a concept into an expansive, established system that is a key segment of American higher education and have made sure that it is the primary means of democratizing higher education. They have thus promulgated this country's one unique contribution to worldwide higher education. With great progress, however, have come the inevitable great problems.

Many of these problems spring from the very fact that the mission of the two-year community college is unique. From the beginning, this movement has attempted to meet the greatest educational needs of the widest possible spectrum of the population. Early on, therefore, the community college has been multi-functional in nature, providing simultaneously trade/technical, transfer, general education, adult, and community service programs.

Active leaders in the community college know this, of course, but can they truly answer the following related questions? (1) How effectively does any one of these programs accomplish its objectives within any one or any combination of institutions? (2) Are these objectives best accomplished in a comprehensive two-year college that incorporates them all, or in a college that emphasizes only one or two? (3) How extensive are student, faculty, administrative, and community consensus and commitment to these objectives? (4) What are the effects when consensus regarding and a commitment to these objectives do not exist among the college's constituent groups?

A few more basic questions emerge from the fact that the two-year college unquestionably plays the dominant role in providing the currently espoused universal higher education -- that is, at least two-years of education beyond high school for all who can profit from it. The further questions that must be faced, therefore, are: (1) Just who can profit from this experience? (2) How is this experience to be determined? (3) What ultimate effect will it have on those who presumably can profit from it?

Issues

With these questions in mind, The Study of Junior Colleges was undertaken by the Center for the Study of Evaluation at UCLA.* The project entailed seeking the counsel of junior college leaders on issues such as those raised above, learning all possible from the literature available, and pursuing the questions empirically and intensely through selected case studies of two-year colleges.

The preliminary effort was to learn from community college leaders either by sponsoring or by listening at major conferences. Consistently the leaders brought up pressing problems concerning articulation, administration, governance, academic freedom, community relations, support services, finances, and especially program improvement and the need to evaluate programs.

Other concerns included new roles for students, patterns of staff development, shared data-processing systems, the use of paraprofessionals in the classroom, the infusion of humaneness into education, faculty load, remedial education, educational relevance, the revamping or updating of vocational education, and the communication, understanding, and support of the role of the community college by the U.S. Office of Education.

The need for evaluation of attrition related to these concerns was stressed generally and, more particularly, evaluation of teaching effectiveness, student services, special programs, validation of the functions of the comprehensive community college, systems of accountability, and cost effectiveness of the colleges' programs.

This propriety is underscored by the research available on the community college. A review of much of this research composes the present volume. The review is primarily a critical survey of documents pertaining to community junior colleges. It is not intended as an exhaustive work on two-year colleges but rather attempts to highlight the more crucial

*"The Study of Junior Colleges" (OEC-0-70-4795) was sponsored by the U.S. Office of Education's National Center for Educational Statistics. The overall purpose of the project is noted in the Preface to this volume.

issues, describing convergent, divergent, and interrelated findings and thus isolating areas where information is needed but data are lacking. Therefore, the perspective chosen for the review is, for the most part, a problems approach.

Although in preparing the review, the staff surveyed many books and journal articles, one of their primary reference sources was the files of the ERIC Clearinghouse for Junior Colleges at UCLA. The ERIC Clearinghouse gathers both published and unpublished materials on all subjects related to junior colleges. Over 2,000 ERIC documents were reviewed by the staff of The Study of Junior Colleges and form the basis of the literature review. Both commentary and data-based literature were incorporated, although the latter predominates in many chapters. In addition, interviews in person or by telephone were used to supplement and update some of the written data.

The variables investigated fall into three categories: (1) input variables -- such as student background and personality characteristics; (2) contextual variables -- for example, institutional characteristics, curriculum innovations, counseling services, and faculty characteristics; and (3) outcome variables, including topics such as student performance and post-junior college educational or occupational activities. Resultant discussion focuses on the following topics: (1) student characteristics, including those of student in remedial programs, socioeconomically and educationally "disadvantaged" students in vocational programs; and students who withdraw without completing a program; (2) programs, including remedial, innovative, and counseling and guidance programs; (3) faculty; (4) administration; and (5) the relationship between junior colleges and their communities.

The literature review which follows, therefore, represents a first step in specifying the kinds of information required by both governmental agencies and junior colleges if these institutions are to serve their communities to the fullest extent possible. The present chapter provides a brief, selective overview and implications of the review in this context.

The Student

Today's research corroborates that of the past decade. Speaking of groups, and comparing two-year college students with those attending four-year colleges, there is a continuing consensus of findings to be found in Chapters 2, 4, and 5 that junior college students are lower in socioeconomic status, have less academic aptitude, are less motivated academically, are less self-directed generally, understand less about their own interests and potentials, are less inclined toward leadership activities, are less open in dealing with the world of ideas and creative endeavors, are less aware of the diversity of the world of work, are more uncertain of their reasons for attending college, feel that they are less likely to complete their college education, and seem to possess lower self-esteem and sense of competence.

The above is a regrettably long list of disadvantages found consistently from the first research on junior college student characteristics to the present. It definitely does not mean, however, that all two-year college students suffer from them, for the research also shows many highly motivated, high-achieving students. Indeed, the range of their abilities, aptitudes, and personality traits generally exceeds that of four-year students -- perhaps a more realistic way of perceiving the situation. Also the two-year colleges themselves differ greatly, not only in the characteristics of their students, but also in a variety of important institutional characteristics.

More to the point, however, the disproportionate number of students in two-year colleges who are relatively 'handicapped' educationally is, in many ways, to be expected. A major purpose of the community colleges is to provide higher education for those who would otherwise be barred from this opportunity. Evidence shows that these colleges are accomplishing this purpose to a greater extent than is any other educational institution.

Indicating this as a major purpose of the community college at the same time points out one of its chief challenges. To open the college doors to such a diversity of students is one thing; to assume that they make use of this opportunity is quite another. Unfortunately, the research on the effects of the college's programs on its students is much less clear and plentiful than it is on the characteristics of entering students.

The data reported in Chapter 3 demonstrate that the low-achieving, "remedial" student is a case in point. Estimates of actual remedial course enrollments vary from under 10 percent of the students in midwestern junior colleges (Ferrin, 1971) to 80 percent of those in California (Bossone, 1966) with many two-year institutions reporting that between 60 and 70 percent of their freshmen need some kind of remedial work before they can enter a college English transfer program (Fitch, 1969; Freligh, 1969). The label "remedial," however, does not necessarily constitute an adequate educational or vocational experience. William Moore, (1970), former president of Seattle Central Community College, may have reason for his indictment: "...no other student in higher education is subjected to the deliberate professional neglect that is shown the remedial student [p.1]."

This indictment extends to research on the remedial student and makes it all the more glaring, considering what is known about this student in the community college. So-called remedial students are a heterogeneous group. Although the research is not extensive, it indicates that academic aptitude scores are frequently so misleading that students with low scores on standardized tests have been found to have above-average scores on individual intelligence tests.

On the other hand, although² remedial students have been found to have a disproportionate number of both emotional and physical problems, these conditions are rarely diagnosed or considered in remedial programs. Likewise, lack of motivation affects many remedial students but is seldom considered systematically, either in junior college research or in educational programs. Again, the research to date is limited, but the results are too important to be dismissed.

Programs

Research and evaluation to develop remedial programs appears essential, yet, there is very little of these activities. What little does exist is circumscribed, particularly concerning the requisites of evaluative research.*

*Examples of the growing literature on the essentials of evaluation of educational and related programs are Dressel and Pratt (1971); Messick (1970); Pace (1972); Suchman (1967); and Wittrock and Wiley (1970).

In any event, most of the research reviewed in Chapter 7 indicates the ineffectiveness of remedial programs. This is particularly evident in the best-researched programs, where proper controls and interactions of variables have been used. As exceptions, however, elements of highly evaluated programs have been identified. Briefly, they are selective recruitment, diagnostic testing, special block programs, tutorial assistance, financial aid, transportation money, counseling, and special instructional materials. We might also add the committed, effective teacher, who no doubt compensates greatly for the lack of special programs.

Barriers to effective programs have also been identified: poor placement procedures, lack of communication between counselors and instructors, oversized classes, untrained or uninterested instructors, inadequate course outlines, vague objectives, scanty materials, methodological problems, and instructors' lack of knowledge about their students.

Both the positive and negative points of these and other programs must be identified and quantified for appropriate implementation, replication, or elimination. The question, of course, is whether the programs being identified as successful really matter -- are they enabling junior college students to achieve positive goals?

Chapter 6 demonstrates that the same question applies to vocational education programs, which have little appeal for most students. A 1970 report of the Bureau of California Community Colleges stated that in 1968, just over 7 percent of the students were in trade/technical curricula (excluding business and health programs). According to Garrison (1967), however, three-fourths of junior college students are of middle ability or less and therefore not likely to find a four-year curriculum appropriate for them.

The best predictors of success in vocational programs are still the traditional academic aptitude tests, not tests of vocational aptitude. Predictive power is qualified in this instance, though, given the discovery that most students who enroll in vocational programs do not complete them. It is also possible that the college experience of these students contributed substantially to their vocational attainments and satisfaction even though they did not complete their programs. Once again it is remarkable that the research to date leaves the vocational student largely undefined and vocational programs largely unevaluated.

Educators and others with responsibility for these programs do not really know, therefore, what kind of student can profit from a vocational program, whether he really needs to complete it to achieve vocational proficiency, the value of these programs to the community, or what features of them deserve support and emulation. This is urgently needed information, in view of the important objectives of these programs and the great investment of human and financial resources in them.

The same is true for innovative programs specifically designed for developmental purposes. They are analyzed in Chapter 8 according to three broad categories: (1) individualized instruction, a prominent development in many community colleges; (2) technology as exemplified by Chicago City College's landmark TV experiment and the auto-tutorial techniques developed at Delta College, Michigan, and at Golden West College, California; and (3) attempts at educational relevancy, noted in the development of ecology programs in numerous colleges or in Chicago's Urban Skills Academy.

What is innovative for one institution may be passé for another, but the potential of these programs for all is striking. Surely, too, the potential could be more fully realized if the rationale for choosing one innovative program over another had a data base. Also their potential would be enhanced if they were systematically evaluated on their cumulative, long-range effects, not on the limited, sporadic evaluative research that now exists. What research does exist is almost exclusively confined to specific student achievement in a specific course, generally with little or no control for teaching directly to the test or situation.

The need for thorough evaluation is also seen in the guidance and counseling programs of the community colleges. Given the diversity of the programs offered by the community colleges, and the uncertainty which many students have about their own plans and capabilities, the need for effectively assisting them in making reasonable educational decisions is most apparent. Chapter 9 discusses this major function of the community colleges, including the underlying philosophical considerations of guidance and counseling programs. Much of the literature is merely descriptive and it does not provide clear guidelines for defining a successful counseling and guidance program.

Administration and Faculty

Of course critical to the effectiveness of any community college are the administration and faculty responsible for initiating, overseeing, and carrying out the college programs, innovative or not. There is evidence reported in Chapter 11 that innovation is more likely to take place and faculty and student morale to be higher under two conditions: (1) where the administrator acts and is viewed as an educational leader, not a manager of the system; and (2) where policy formation and decision making include faculty participation rather than the unilateral action of the president. These points apparently bear heavily on the conditions underlying effective educational development, at least by implication. (There is also evidence that roughly 44 percent of junior college presidents have their doctoral degrees, though the relevance of this information is not so immediately apparent.) With the exception of these few findings with far-reaching implications, very little information exists about the people and procedures that lead to the administration of an effective college.

There is also little known about the faculty -- only enough to indicate that much more should be known to best go about educational development. Only a few examples from Chapter 10 that bear on the previous discussion follow. Community college faculty do not generally feel that they are a part of the "community of scholars" or that their colleges provide the climate for their professional growth. Nearly half of the faculty would prefer to teach in a four-year college or university. Many have a negative attitude toward -- or, at best, an indifference to -- nontransfer programs, including remedial programs. The morale of two-thirds of the faculty is not high, mostly because of administrative policy and practice, with the commonly held sentiment that the "administration is tradition-bound, confused in its aims, unimaginative, and too typically inflexible [Garrison, 1967, p. 24]" -- sentiments presumably reciprocated by the college administrators.

Faculty members most likely to accept the stated role of the community college, on the other hand, are usually under forty-five years of age, have had some formal course work and in-service training in junior college teaching, and spend more hours at their job.

These observations could profitably be extended to the community. But a complication here, as indicated in Chapter 12, is that almost no research exists on the nature of the community served or on its members' attitudes, images, or needs as they relate to the college. The foregoing, however, illustrates sufficiently the pivotal role of both broad-based and institutional research in community college educational development.

Implementation of Needed Research

This research is essential at the national level to provide guidelines for system-wide planning, funding, and program implementation. Obviously it is equally essential at the individual institutional level, where ultimately problems must be solved and programs implemented.

"Problems" are mentioned because the array of research indicates their prevalence and severity, but their enumeration should in no way be construed as a negative attitude toward two-year colleges. Four-year colleges and universities also have many problems, which, although they may differ from those in two-year colleges, are doubtless as pervasive and as severe. In any case, the understandable temptation of many professionals responsible for maintaining the two-year college is to ignore the research as hostile and, therefore, inconsequential.

That many of the researchers whose findings are considered abrasive value the community college as much as those who are responsible for maintaining it is incidental to the fact that ignoring the research is detrimental, whatever the orientation of the researcher. Ignoring findings and their implications will not eradicate the problems, but may well increase them. Likewise, indulgence in pessimism over the research can only be debilitating. The more positive approach is to use the research -- and the researchers -- to delineate major problems and potentials in the most concrete terms possible so that they can be dealt with most efficaciously.

B. Lamar Johnson (1965) draws on a suggestion of Philip Coombs (1960) in asserting the need for a vice-president for heresy -- the heresy meaning a departure from the status quo or a change to a better program or system of education. John Roueche, of the University of Texas, and members of the National

Laboratory for Higher Education have the same idea in mind when they speak of the educational development officer (EDO), a change agent who must make the best use of research to indicate changes needed and the effects of the changes once initiated. This concept is critical: institutional research is essential to the determination of needed programs, the modes of implementing their objectives, the monitoring of their development, and the assessment of their effects. This role, going far beyond the counting and projection of class enrollments or space requirements (typically conceived as the whole of institutional research) does exist, although too rarely, and can flourish only if increased attention is given to several aspects. The following represent important directions.

1. Federal Involvement. A major conclusion resulting from this volume is that community junior colleges need accurate and comprehensive data in order to fulfill their wide range of roles and to serve best their diverse student populations. Evaluative research is vital to all aspects of development in junior colleges. Likewise, local, state, and federal agencies must have adequate information if they are to be of optimum assistance to junior colleges. This necessitates the continued -- indeed greatly increased -- interest, support, and coordination of key agencies in the U.S. Office of Education and the newly formed National Institute of Education. This not only means the establishment of adequate data banks but also the delineation and support of collaborative efforts and training programs such as those suggested below.

2. Administration Orientation and Support. Institutional evaluative research can be done only with the strong moral and financial support of the administration. Often this will call for the orientation of administrative and governing officers to the nature and value of good institutional research and for seeing that the research relates to the information needs of administrators -- keeping in mind, however, that the greatest needs are not always immediately perceived.

3. Pooling of Resources. Not every two-year college is well enough equipped to undertake its own institutional research; but a number of neighboring institutions can pool their resources, exchanging and enhancing each other's research talent, facilities, and ideas for their mutual benefit. More attention might also be paid to existing consortia for this purpose. Examples of such enterprises are the Research and Development Committee of the California

Association of Junior Colleges, Florida's Junior College Inter-institutional Research Council, and the League for Innovation in the Community College. In addition, the American Educational Research Association's recently formed Special Interest Group for Research in the Junior College aims to provide among other things, research and development services to specific colleges or groups of colleges greatly in need of them. With the inevitable wide gaps between objectives of this kind and their realization, the only way to close them is through proper support at federal, regional, and local levels.

4. Use of System-wide Research and Development. A number of federally funded and private educational research and development centers and corporations devote many of their efforts to junior colleges nationwide. Among the prominent organizations of this kind are the Educational Testing Service (ETS), the American College Testing Program (ACT), the National Center for Higher Education Management Systems at the Western Interstate Commission for Higher Education, the National Laboratory for Higher Education, the Center for Research and Development in Higher Education at the University of California at Berkeley, UCLA's ERIC Clearinghouse for Junior Colleges, and also the Higher Education Evaluation Program of UCLA's Center for the Study of Evaluation. Independently and together, these organizations are developing informational and technological resources with great applicability to junior colleges, singly or as a system. No doubt, increased communication, as well as the sharing of needs and resources between the research and development organizations and the colleges, would contribute to the development and effectiveness of institutional research and its subsequent application. Such communication should also help the research organizations to be more aware of and responsive to information and resource needs of the colleges. Here again, sufficient financial support is critical. More support is urgently needed for the maintenance and improvement of the research and development efforts and for making it possible to implement these efforts in the individual institutions.

5. Collaboration with University Researchers. Numerous university researchers have a sincere concern for the excellence of the two-year college, whatever critical stance is indicated by their research. Whether they work independently or under the auspices of formal research and development organizations, increased collaboration between these individuals and their counterparts or "users" in the two-year college should further enhance the gains from the types of institutional research

discussed here. The sharing of information and resources to improve the data base and applicability of institutional research from the university perspective should result in more implementation and increased relevance to the junior college.

The need for communication is just as important. Ways of increasing communication between university and community college personnel might be through joint seminars and workshops, the periodic exchange of key personnel to provide mutual "in-service training" experiences and also through collaborative institutional research and development efforts.

These and any number of other possibilities could profitably occupy a whole series of conferences, but it is more important that they progress beyond mere discussion. If those concerned seize the opportunity to work together on the implementation of suggestions such as those enumerated, they will assure that research is indeed the basis for educational development and that this development will become more pervasive and effective.

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CHAPTER 2

WHO PASSES THROUGH THE OPEN DOOR?

Clare Rose

The Junior College Student

College students differ greatly, not only in terms of traditional academic variables such as high school grades and test performances, but also in terms of interests, values, educational aspirations, occupational plans, and a host of other socioeconomic and psychological variables. There is some evidence that two-year colleges differ from four-year colleges and universities in the kinds of students they enroll, and that within the junior college there is a greater diversity of students enrolled.

This chapter presents a review of existing research on the academic, socioeconomic, and personal characteristics of junior college students. This literature includes local, state, and national investigations. Two basic methods of obtaining descriptive data were employed in these studies: survey questionnaires and the use of school records. While the number of studies dealing with the junior college student is relatively small, taken as a whole the findings should provide information useful for decisions regarding future research. This information should also contribute to decisions regarding counseling and special enrichment programs.

Academic Characteristics

Open-door two-year colleges in particular are confronted by large freshman classes with diverse educational needs, potentials, and achievements. A crucial issue in understanding the junior college student is the assessment of his academic ability (aptitude and achievement). Predictive information is needed for the appropriate placement of these students and for other decisions made by deans, department heads, presidents, registrars, and admission officers. Virtually all the studies reviewed based their measures of aptitude and achievement on standardized test scores, high-school grade point averages, rank-in-class indices, or combinations of the three.

There are two salient generalizations that emerge from a review of this literature. First, junior college students across the nation have, on the average, lower ability scores on traditional tests (such as American College Test, Scholastic Aptitude Test) than students attending four-year institutions, and higher ability scores than non-college attending students. To conclude, however, that all four-year college students are superior to all two-year college students would be incorrect, and the stereotypic picture of an

academically inferior junior college student is unfortunate. This picture is misleading particularly in light of the second generalization which emerges from the studies reviewed, namely that there is a greater range of ability among students attending junior colleges across the nation, than among students attending four-year institutions. The junior college, in fact, must contend with the entire range of academic talent, from the most gifted to the student of borderline intelligence (Medsker, 1960; Koos, 1970).

The literature concerning academic characteristics will be reviewed in three sections, the first deals with the mean difference in ability of junior college, four-year, and non-college populations; the second with the variability and overlaps of junior college students' ability scores with those of students at four-year institutions; and the third with the characteristics of transfer students.

Mean Difference in Ability

National studies examining ability scores of entering freshmen indicate that four-year students have the highest ability scores, junior college students the second highest, and non-college attending students the lowest.

Project TALENT began in 1960 with extensive testing of 440,000 high school students from a five percent probability sample of the population of high schools in the United States. A portion of the results from Project Talent data reported by Cooley and Becker (1966) and by Flanagan, Cooley, and others (1966) are based on 14 measures of ability and achievement which included vocabulary information, reading comprehension, mathematics ability, abstract reasoning, creativity, physical science, and arithmetic computation. There was a consistent increase in mean ability scores for both sexes from non-college through junior college to college groups. In general, the junior college group fell between the four-year and non-college groups.

Other studies of national scope verify Project TALENT findings. Seibel (1965) found that the mean scores of four-year students were higher than two-year students on PSAT (Preliminary Scholastic Aptitude Test) verbal (45.9 versus 38.4) and on PSAT mathematical (49.9 versus 41.3). The rank-in-class index was similar to the means for two-year and four-year institutions (13.3 versus 15.8). The means for high school graduates not attending college were considerably lower than those attending two-year colleges.

A major project investigating the influence of both ability and socioeconomic status and other environmental factors on college attendance was

undertaken by Medsker and Trent (1965). They did a follow-up study of some 10,000 June, 1959, high school graduates from 16 communities of comparable demographic and industrial makeup with populations ranging from 25,000 to 100,000. Of the total sample, 43 percent (n=4,300) entered a college. Of those, 55 percent went to local public institutions, four percent to local private institutions, and 41 percent went to colleges outside of the community. Of graduates entering private two-year colleges regardless of location, 54 percent were in the two highest ability quintiles of their classes. A substantial proportion of the more able graduates also entered the public two-year colleges.

Data concerning characteristics of entering students reported by Richards and Braskamp (1967) were obtained from tests of students applying to colleges using the American College Testing Program (ACT) assessment information -- test scores, high school grades, special interests, campus-needs, and non-classroom accomplishments. A sample of 102 colleges was obtained by including all colleges that participated in the 1965 post-enrollment ACT class profile service and were listed in the table of junior colleges. Means and standard deviations on junior college factor scores were compared and the results indicated that the colleges were fairly representative of the national population of two-year colleges. These data indicated that students at two-year colleges tended to be less able academically than their peers of the same age at four-year colleges both on the ACT test and grade point average. Although no comparison with random samples of the national population were made, these findings do support those from other national studies and reports (see, for instance, Astin, Panos, and Creager, 1967; Baird and Holland, 1968; Cross, 1969; Hoyt and Munday, 1966; Seashore, 1958).

Variability of Junior College Students' Ability

The consensus of research findings reviewed indicate that although junior college students as a group manifest less academic aptitude than four-year college students, there is great variability of academic ability within each junior college and from college to college. In the project TALENT study, there was considerable overlap of the distribution of scores for the non-college, junior college, and four-year college groups. One-third of the junior college students fell below the non-college mean, one-third fell above the college mean, and the remaining one-third fell between the average non-college student and the average

college student. Cooley and Becker (1966) concluded that there was a tendency for junior college students to be more like non-college students in terms of ability (see also Flanagan & Cooley, 1966; Jaffe & Adams, 1964). A study of diversity in aptitude by Hoyt and Munday (1966) revealed that on ACT test scores, students at two-year colleges were more heterogeneous than those at the typical four-year college.

Seibel (1965) found considerable overlap in the distribution of scores for students attending the two types of institutions and concluded that there are many high-ability students attending junior colleges. Medsker and Trent (1965) found that four-year colleges draw approximately three-fourths of their freshmen from the upper 40 percent of the high school graduating class, but that at least half of the junior college students who transferred to four-year institutions were also in the upper 40 percent of their high school graduating class. Tillery (1964a) found that 18 percent of the high-ability California high school graduates eligible to enter the state university (approximately the upper 15 percent of the high school graduating classes) entered a two-year college instead. He estimated that this group constituted about five percent of the junior college freshmen in 1961.

Although several of the studies reviewed were longitudinal and national in scope and included some data concerning junior college students (American College Testing Program, 1966; Astin, Panos, & Creager, 1967; Flanagan, Shaycroft, Richards, & Claudy, 1971; Hoyt & Munday, 1966; Medsker & Trent, 1965; Seibel, 1965), there is a lack of nationwide empirical studies whose main focus is the junior college and which follow students through the two years and beyond. Some follow-up data, however, was analyzed by Schultz (1967) for 2,758 alumni members of Phi Theta Kappa, a national honor society (criterion for membership is ranking in the top 10 percent of the junior college class). Data were drawn from alumni members from the classes of 1947-48, 1957-58, and 1960-61. Two-thirds of the total sample were from public and one-third from private junior colleges. Ninety-one percent of the men and 70 percent of the women had transferred to a senior college. Of those transfers, 98 percent of the men and 90 percent of the women graduated with a B.A. Nearly two-thirds reported receiving scholastic honors, one-quarter were awarded academic scholarships, and two-fifths held some student office while in senior college.

An example of comprehensive longitudinal institutional research is provided by a study prepared and reported by Oakland, California's Merritt College Student Personnel Office (1963). Comprehensive data from questionnaires and high school records were obtained from all first-year freshmen ($n = 1,476$) entering Merritt in Fall 1960 and again at the beginning and end of the next seven semesters. Data collected on the 849 men and 627 women included age, high school attended, test scores, educational objectives, unit load, probation status, socioeconomic background, etc. SCAT (School and College Ability Test) scores of the males were relatively evenly distributed across all deciles ranging from 1 to 10. Female SCAT scores, however, were heavily weighted in the three lowest deciles, with only 27 percent of the female scores above the fifth decile. By Spring 1962, 72 percent of the group were not enrolled and only 12 men and nine women (1.4 percent of the original group) received their A.A. degrees, in June 1962, although 25 additional students had completed the required 60 units of work. It should be noted that of the 21 students who completed their A. A. degree, the average SCAT score was in the 55th percentile. Seventy percent of the females and 50 percent of the males in this graduating group had SCAT scores below the 50th percentile.

The relationship between SCAT performance and persistence is not clear from the findings obtained either in the Merritt study or in several other state and local research studies revealing wide diversity in academic ability and achievement (see Anderson & Spenser, 1968; Cohen & Brawer, 1970; Gold, 1970; Hartmann, 1968; Heist, 1960; MacMillan, 1969; William, 1966). As expected, however, those in the lowest SCAT percentile groups have lower persistence rates. Moreover, Gold (1970) found that a comparison of SCAT performance and grades below "C" and above "B" shows a clear positive relationship in the highest and lowest quintiles for all four semesters. (The literature in attrition and persistence will be reviewed in Chapter 5).

The implications of these findings for curricular programs are considerable. Individual colleges need to use extreme caution in generalizing from summary statistics to the local situation. Obviously special enrichment programs should be designed for the comparatively high ability students entering four-year colleges. However, it is equally apparent that special programs should be instituted for low ability students, and particularly those who enter junior colleges on probation, whose likelihood of remaining in junior college is questionable. In

both cases, objective and systematic evaluation of these programs' impact on the students is essential (Chapter 4 presents a discussion of remedial programs.)

Transfer Students

Another area of research is the ability and achievement of transfer students. Findings of several studies, mainly local and small-scale, vary widely (Hills, 1965; Pearce, 1968). The most definitive and comprehensive investigation of transfers from two-year to four-year institutions was undertaken by Knoell and Medsker (1964). Transfers were studied in ten states with extensive junior college development: California, Florida, Georgia, Illinois, Kansas, Michigan, New York, Pennsylvania, Texas and Washington. In the study, 7,243 junior college students who transferred to 44 four-year institutions were compared with 3,349 "native" students in these institutions.

Unfortunately, it appears to have been impossible to follow a procedure involving matched comparisons. The authors note that "ideally a comparison of native and junior college transfer students would involve the selection of matched groups at the freshman level in the two types of institutions with a follow-up over at least a five-year span [p.127]." Post hoc efforts to compensate for this lack took the form of percentage comparisons of the two populations in various important respects, including academic aptitude, socioeconomic status, marital status, grade point averages earned at upper and lower college levels, and percent graduated within the regular four-year period.

With respect to comparisons of ability and aptitude, the investigators used evidence from tests already available in the cooperating institutions. The use of a wide variety of tests given at different times in the educational careers of the subjects made it impossible to determine if these tests were in fact measuring the same abilities and aptitudes. The data for comparisons were supplied by nine institutions in six states but only for students who graduated. The data do not, however, take into admitted consideration the scores of students who dropped out. In general, however, the findings do corroborate the conclusions drawn from less extensive studies (for example, Turnipseed, 1968; Walker, 1969). Native students tended to earn higher grade point averages and higher scores on ACT tests than the transfer students and to have superior ability as defined by the institution.

Summary

Both the overlap among students in two-year and four-year colleges and the differences among individual institutions as revealed by research described above indicate the danger inherent in the generalization that students in four-year colleges are superior to students in two-year colleges. Although relatively large proportions of junior college students are less academically able than four-year students as measured by traditional standardized tests (ACT, SCAT, etc.), they may excel in other areas. Intelligence and ability have traditionally been defined as the ability to perform well on these tests. In other words, ability had been defined in terms of the very instruments used to measure it. A question that should be researched is whether junior college students who do not perform well on standardized tests of ability have special abilities or "untraditional" aptitudes. The lack of academic competence may be eventually overcome or compensated for by competence in other roles (Cohen & Brawer, 1970).

Although grades, scores on ability tests, and students' estimates of their own ability and intelligence are strongly related to all aspects of post high school behavior (college entrance, type of college entered, and persistence), the high school curriculum (college preparatory or non-preparatory programs) is of overriding significance not only for entering college, but also for the type of college entered and for continuing or dropping at each type of school. Jaffe and Adams (1971) found that there was virtually no apparent association between grades and academic self-image of the two-year college dropout. In contrast, the high school curriculum was associated with two-year college dropouts at the .01 (chi square) probability level.

High school curricular choice, although of course considerably related to ability and socioeconomic status, nevertheless reflects underlying personality attributes or predispositions quite apart from ability, class, and income; and its relative influence should be more carefully scrutinized.

Socioeconomic Status

Trent (1970) argued that there is a direct, positive correlation between academic aptitude and socioeconomic status and that the two variables together are more predictive of college attendance than either one separately. The relative importance of each variable for decision to attend college is not clear. While the socioeconomic status of students, as indicated by father's occupation and level of family income, has been investigated rather extensively, the relative influence of the particular components of socioeconomic background, (i.e., income level, education of parents, educational environment of the home) on students' college attendance has not yet been definitively ascertained. In general, the consensus of research findings indicates that larger proportions of junior college students come from homes of fathers with low level occupations, lower income, and less education; smaller proportions of junior college students come from high socioeconomic backgrounds.

The 1966 American Council on Education (ACE) study of 250,000 students entering a sample of 307 institutions in the fall of 1966 (Astin, Pans, & Creager, 1967) shows a socioeconomic order similar to that found in the Medsker and Trent (1965) study of 10,000 high school graduates. The ACE study used a form designed for longitudinal research; it contained biographic and demographic items administered annually to each entering class. This design, coupled with large overlap in participating institutions from one year to the next, provides a basis for judging trends in the characteristics of entering freshmen.

Both the Medsker-Trent and the ACE study (Astin, et al., 1967) suggested that private universities are most selective, attracting predominantly the children of high income, high occupational level, college-educated parents. They are followed closely by public universities, then private four or five-year colleges. Public two-year institutions are least selective, serving relatively large proportions of high school graduates from lower socioeconomic backgrounds and smaller proportions of students from high socioeconomic backgrounds (see also Windham, 1969; Novak, 1969).

Finances

Data from several local studies also indicate cost as a major consideration in the student's choice of college (e.g., Florida Board of Regents, 1970; Gold, 1968; Jordheim & Leopold, 1965; Lembke, 1968).

Contradictory findings were obtained by Sensor (1964) and Jaffe and Adams (1971). Examining both academic and socioeconomic variables, Jaffe and Adams found academic variables more significant than economic ones for college entrance. For example, the difference in college entrance rates between students with incomes of \$7,500 and over and those with incomes under \$7,500 is 25 percentage points, whereas it is 38 points between students with better and poorer self-images in high school, and 60 points between college preparatory and non-preparatory students. However, these one to one relationships as such do not take into consideration the interactions of all the variables considered and therefore it is difficult at this point in time to generalize about any one of the relationships.

Apart from college entrance, family income has no apparent relationship to the type of college entered and no statistically significant relationship to retention at either two- or four-year colleges. Jaffe and Adams concluded that once the initial sorting of entrants and non-entrants by family income is completed, most of those who do enter, whether affluent or poor, manage to stay in college; dropping out or continuing are determined by non-financial factors. (see also Trent and Medsker, 1968.)

Since one of the major costs of college is room and board, it is not surprising that the availability of a college in the student's home community is a factor affecting the student's choice of college. Medsker and Trent (1965) found the highest percentage of high school graduates who continued their education in communities with junior colleges. There was a considerable difference (20 percent) between students entering college in communities with some college compared to communities with no college. (See also Jaffe and Adams, 1971.) Medsker and Trent (1965) concluded that the impact of local colleges was greatest for students of high academic ability from lower socioeconomic levels. While 80 percent of the academically able high school graduates from high socioeconomic backgrounds went to college even if there were none in the local community, only 22 percent of the lower group of the same level of ability did so. Unfortunately, the number of communities in this study with public junior colleges was not very large.

Therefore, this research ought to be extended to determine the extent to which this situation is generalizable to the country at large.

Parent's Occupation

A difference in socioeconomic status as reflected by parent's occupation was found with respect to junior college transfer students compared to "native" students. Knoell and Medsker's (1964) investigation of transfer students revealed a larger proportion of fathers in professional groups for native students than for transfer students (22 percent versus 15 percent), and greater proportions of fathers in skilled and semi- or unskilled workers for transfer students (34 percent versus 27 percent).

Larger percentages of natives than transfers (40 versus 25 percent for men, 31 versus 22 percent for women) received about one-half to all of their support from parents; and, correspondingly, a larger proportion of transfer than native students received none to less than half their support from parents. To a considerable degree, then, it appears that native students come from more economically and educationally privileged families than do transfer students.

Since junior college students receive less support from their parents, it is not surprising that more than half of them work at least part-time while attending college (Astin, et al., 1967; Dalby and Fox, 1967; Gold, 1970; Hawthorne, 1970; Jordheim & Leopold, 1965; Knoell & Medsker, 1964; Lembke, 1968; Medsker & Trent, 1965; Merritt College Student Personnel Office, 1963; Novak, 1969; Tillery, 1968).

A nationwide investigation of the relationship of family income and college attendance (Cline, 1967) indicated that only 19.5 percent of freshmen in two-year and four-year public and private institutions come from families with annual incomes of less than \$6,000 while 40 percent of the families had such incomes. (See also Beanblossom, 1969; California Coordinating Committee of Higher Education, 1967; Florida Board of Regents, 1970; Gleazer, 1968; Novak, 1969; Windham, 1969)

Large proportions of honor students also come from modest socioeconomic backgrounds with limited financial resources. In Schultz's study (1967) of honor students two-thirds of those who graduated from public junior colleges came from families where the father's employment was classified as blue-collar or less. Over one-fourth of the fathers of alumni from junior colleges had not continued their education beyond the eighth grade and 69

percent had no formal education beyond high school. One-third of fathers of alumni from private junior colleges had not finished high school and over one-half had not attended college.

Parent's Education

In several of the previously cited nationwide investigations, the highest levels of education attained by parents were compared for students attending the different types of institutions. The American Council of Education (ACE) study revealed that 64 percent of the fathers of students attending a private university, 49 percent of the fathers of students in public universities, and 34 percent of the fathers of junior college students had attended college (Astin, et al., 1967). The Medsker and Trent (1965) data for the same three types of institutions are respectively 61, 49, and 29 percent.

The ACE data indicate the mother's education may be more important for daughters' choice of college than for sons'. Fifty-seven percent of freshmen women at private universities, 42 percent at four-year universities, and 34 percent at junior colleges reported their mothers had at least some college education. For men, the percentages of mothers with college education were 39 percent at universities, 38 percent at four-year colleges, and 27 percent at junior colleges.

The Medsker-Trent study indicated that the mother's education was more significant in predicting college attendance than the father's although data reported by Schoenfeldt (1966) showed little difference between parents' education as predictors of college attendance.

For their comparison of highest level of education attained by fathers and mothers of native and transfer students Knoell and Medsker (1964) used three classifications: less than high school, high school graduate, attended college. For transfer students of both sexes, there was a considerably larger proportion of both fathers and mothers at the lower educational level. Correspondingly, for native students of both sexes, considerably larger percentages of both fathers and mothers had attended college. Similar findings concerning the educational level of parents have been obtained from national, state, and local studies (Flanagan and Cooley, 1966; Florida Board of Regents, 1970; Gaj, 1969; Novak, 1969; Snyder & Blocker, 1970).

Educational Environment

Variables such as the educational, occupational, and income levels of parents are generally indicative of the educational stimuli in the home and of parental attitudes towards education. The relative influence of socioeconomic status on college attendance may well be a result of other factors related to but separate from the particular variables of family income and parental education. For example, Medsker and Trent (1965) found that students who stated that they did "quite a lot" of serious reading also tended to report that their parents often read serious materials. Students tended to reflect their parents' interests rather faithfully in their choice of magazines and music and the extent to which they discussed current affairs.

In a subsequent longitudinal study of the same sample, Trent and Medsker (1968) found that the attitudes of parents regarding college attendance had a profound effect upon whether students go to college, what type of college they attend, and even how long they remain in college. Seventy per cent of the college students studied had stated as high school seniors that their parents definitely wanted them to attend college. Only 48 percent of the students who dropped out during the four-year period felt that college attendance was important to their parents and only 15 percent of the bright high school seniors who did not attend college reported having received parental encouragement.

According to the SCOPE data (Tillery, 1970) over one-third of junior college students come from homes in which their parents did not want them to complete college. Tillery comments that this is almost exactly the percentage of junior college students who traditionally declare non-transfer majors upon entering the junior college. This parental influence on students' decision-making about career and education has also been discussed by Simpson, 1962; Tillery, Sherman, & Donovan, 1968.

Summary

Several major conclusions about socioeconomic characteristics of college students have been summarized by Trent (1970):

1. There is a relationship between socioeconomic status and the type of college entered. The widest range of socioeconomic status is found in the junior college, but it has the largest representation of students of low socioeconomic status and the smallest representation of high socioeconomic status students.

2. The chances that children with superior intelligence will attend college increase with their socioeconomic status. There has been an increase in recent years in the proportions of students who attend college, and in some regions a majority of high ability students of low socioeconomic status enter college. Yet, the socioeconomic distribution of college students has not changed appreciably.

3. The relationship between socioeconomic status and college entrance varies by sex and race. Caucasian men of high socioeconomic status, particularly those with high grades, are most likely to enter college. High ability and high socioeconomic status women differ only slightly from the men, but when achievement is not exceptionally high, proportionally fewer women than men enter college, particularly at lower SES levels.

4. If open-door two-year colleges are at least in part educating those students not being served by senior institutions, one would expect higher proportions of non-whites. There is no evidence that this is happening (Berg & Axtell, 1968; Creager et al., 1969; Cross, 1969; and Tillery, et al., 1968).

5. There is evidence that finances are an important factor in the decision to attend college, especially for high ability, low socioeconomic students. Junior college students tend to select their institutions because of low cost and proximity to home. There is also evidence, however, that the socioeconomic level of the family, independent of both ability and finances, is a significant factor in a student's determination of the level of education he undertakes after high school. The economic factor alone is not the key variable in the decision to enter college, regardless of socioeconomic status. (Jaffee & Adams, 1964; Schoenfeldt, 1968; Trent & Medsker, 1968).

6. Research indicates that a majority of parents at all socioeconomic levels would like their children to have a higher education, but upper socioeconomic level parents place greater emphasis on higher education, do much more to encourage their children to attain it, and provide a more educationally-oriented home environment.

The consensus of findings indicates that as a group junior college students come from relatively a lower socioeconomic status than four-year college students. Apart from the fact that there is great overlap between the two groups on this dimension, it is also quite clear that parental attitudes which vary according to socioeconomic status are a highly important mediating variable. The availability of college in the community also has a significant impact upon students from lower socioeconomic level. It is also true, however, that junior colleges have quite different goals and environments than other colleges and universities. Richards and Braskamp (1967) have suggested that perhaps junior colleges are attaining these goals by serving the needs of the lower socioeconomic group.

Despite the relatively large number of studies investigating the influence of socioeconomic status on college attendance, and despite the fact that numerous studies consistently verify the relationship between socioeconomic status and educational aspiration and attainment, we are still unable to completely document the complex interactions of cost, parental influence, home environment, and proximity of college. Reviewing numerous projects and articles on socioeconomic environment, Trent (1970) summarized the research as indicating that socioeconomic status appears to determine environmental conditions which in turn condition such personality variables as academic self-concept and need for achievement, and that these variables differentiate college-bound and non-college bound subjects. Although these personality variables will be treated more extensively below, it should be mentioned here that while motivation for college attendance may be promoted or stifled by parental influence and home environment, it may perhaps be modified by proximity and low cost of attending a college. The lack of parental encouragement to attend college may be compensated for by both high school and junior college counseling programs. The impact of the total junior college experience on each of the socioeconomic sub-groups of students has yet to be investigated. Further exploration into the precise role of finances as well as the role of the components of socioeconomic status in the educational plans and activities of junior college students is needed.

Personality Characteristics

A final series of factors that must be considered is student personality characteristics. In addition to the student's academic and socioeconomic characteristics, his aspirations, vocational goals and choices, and intellectual orientation are pertinent to his success in college and the impact of the college experience upon him. This section will discuss some of the literature which deals with these and other personality characteristics.

Aspirations

The consensus of findings on educational aspirations and attainment indicates that, in general, junior college students have lower educational and occupational aspirations than four-year students. Specifically, findings from the ACT data (1966) indicate that 45 percent of junior college students

plan to obtain a B.A. compared to 51 percent of four-year college students and 47 percent of university students. The ACE data (Astin, et al., 1967) indicate the following percentages of students planning to obtain a B. A.: 38 percent in the junior colleges, 39 percent in the four-year colleges, and 39 percent of university students. The percentages of students planning to continue their education beyond the B. A. are 24 percent of junior college students, 31 percent of four-year college students, and 41 percent of university students (ACT, 1966). The ACE data indicate even higher educational aspirations for all groups, probably because this study included a larger portion of selective four-year institutions than did the ACT sample; the ACE data (Astin, et al., 1967) for students planning to continue beyond the bachelor's degree were 30 percent of junior students, 55 percent of four-year college students, and 53 percent of university students. Several statewide studies indicate comparable percentages (see for example, Beanblossom, 1969; Boyer, 1968).

Many researchers have concluded that the educational and vocational aspirations of junior college students are unrealistic. (e.g., Astin et al., 1967; Blocker & Anthony, 1968; Cross, 1968; Davis, 1964; Novak, 1969; Trent & Medsker, 1968; Trent & Ruyle, 1965). The 1967 follow-up of the ACT sample (Baird, Richards, & Shevel, 1969), revealed that although two-thirds of the sample of junior college students said they planned to transfer to four-year colleges and universities (89 percent said they wanted at least a B.A.), only one-third had been accepted by such an institution.

Similarly, in Trent and Medsker's (1968) longitudinal study, only about 10 percent of those who began their college education in junior colleges in 1959 had obtained bachelor's degrees by June 1963, compared with 27 percent of state college entrants, 36 percent of those attending public universities and 49 percent of those attending private colleges and universities (Trent & Ruyle, 1965). Two things should be kept in mind. First, college students in general are taking longer to obtain their degrees (Cross, 1968; Stivers, 1969; Trent & Medsker, 1968). Second, junior college students who do transfer are relatively successful in obtaining their educational goals. Knoell and Medsker (1964) found, for example, that 62 percent of the junior college transfer students were granted their baccalaureate within three years of transfer and nine percent were still enrolled at the beginning of the fourth

year. State and local studies which report similar findings of success for transfer students include Finnberg, 1960; Gold, 1969; Herman Lehman College, 1970; Johnson, 1965; Oregon Office of Academic Affairs, 1968.

Decision to Go to College

One possible explanation for the discrepancy between goals of a B. A. or higher degree, and the proportions of students reaching these goals may be found in data on the decision to attend and the preparation for college.

In the SCOPE study (Tillery, et al., 1970), 90 percent of the four-year college group, 62 percent of junior college students, and only 25 percent of the non-college group had taken the necessary preparatory courses for college. An additional finding that 16 percent of the students who planned to go to four-year colleges as late as the second half of their senior year, started a junior college instead perhaps indicates that the majority of these students lacked the necessary prerequisites for senior college.

Over two-thirds of the senior college group said they had decided to attend college before their senior year in high school, a fact which probably accounts for the larger proportions of these students who had taken college preparatory courses. Only 49 percent of the junior college students had made a decision that early, 33 percent made the decision during their senior year, and 13 percent still did not know what they would do after high school in the spring semester prior to graduation. These findings are consistent with those of Medsker and Trent (1965) who found the highest proportion of early deciders (by the 8th grade or earlier) of both sexes to have entered Ph. D. institutions; the proportion of late deciders was inversely related to the degree level of the institution attended. Tillery (1964) pictured late deciders as highly diverse in academic ability, educational achievement, and aspiration. Those with modest ratings on these characteristics are disproportionately represented among late deciders who attended less selective institutions, particularly the public junior college. Although one-half of the students who went to college made late decisions, men were overrepresented in this group.

Also consistent with these findings are those of Knoell and Medsker (1964) concerning transfer students. Those who made an early decision to attend college experienced less attrition and were more likely to graduate on time than those who delayed their decision until graduation from high school.

Reasons for Attendance

There is a general agreement in the research that students attending junior colleges are more influenced by practical and economic considerations and less by intellectual interests than are four-year students (Baird, 1967; Baird, Richards & Shevel, 1969; Glenister, 1969; Jordheim & Leopold, 1965; Knoell & Medsker, 1964; Richards & Braskamp, 1967; Tillery, Donovan & Sherman, 1968).

The ACT profile reported by Richards and Braskamp (1967) was based on data from a questionnaire administered to 4,000 students at 29 two-year colleges. According to this profile, the two-year college students were more likely to select a "practical" major such as business or agriculture and less interested in the humanities, sciences, or social science.

The SCOPE questionnaire used by Tillery and associates (1970) yielded similar results. High school seniors were asked to select from four descriptions of colleges the one they would most like to attend. The academically-oriented college appealed to 23 percent of the four-year college group, nine percent of the junior college group, and nine percent of the non-college group. Conversely, the vocationally-oriented college appealed most to the non-college and junior college groups (37 and 24 percent), and to only 10 percent of the four-year college group.

Vocational Goals and Choices

The differences in vocational goals and choices of fields of study are also noteworthy. Differences on occupational aspiration for the three student groups are found in the SCOPE data reported by Tillery (1970). Eighty-nine percent of the four-year college students aspire to managerial and professional occupations compared to 64 percent of junior college students and 36 percent of the non-college group. Conversely, 49 percent of the non-college group aspire to skilled and semi-professional occupations compared to 39 percent of the junior college group and only 10 percent of the university group. About two-thirds of the junior college students come from managerial and professional homes, and about two-thirds of them aspire to these occupational levels. Many statewide and local studies of junior colleges have investigated vocational orientation of junior college students. (See, for instance, Beanblossom, 1969; Blair, 1969; Glenister, 1969; Jordheim & Leopold, 1965).

Intellectual Orientation

Several studies concerned with vocational versus intellectual orientation used the Omnibus Personality Inventory (OPI), which consists of approximately 14 scales selected for their relevance to academic activities and potential importance in understanding and differentiating among college students. One application of the Omnibus Personality Inventory to junior college students was made by Tillery (1964a). Subjects were selected from the upper 14.8 percent of high school graduates, those eligible to enter the University of California in 1961 ($n = 2,319$). Of this sample, 26 percent actually attended a University of California campus after high school graduation and 18 percent went to a junior college.

A test composed of the most discriminating items from the Thinking Introversion, Theoretical Orientation, and Autonomy scales of the OPI was devised to test intellectual "predisposition." The hypothesis was that students with high scores on the intellectual predisposition scale would demonstrate greater interest and commitment to the ideational and academic aspects of school life than would those with low scores. Among high scorers 31 percent attended the university and 18 percent junior college. Among the low scorers, 16 percent went to the university and 25 percent to junior college. The contrast was greater for women than for the whole group; 36 percent of the university women had high scores compared to 19 percent of the junior college women.

As a group, junior college students tend to show less interest than senior college students in the intellectual areas sampled by the OPI scales (abstract thinking, originality, etc.) and greater tendencies toward conventional and rigid thinking (Glenister, 1969; Trent & Medsker, 1968; Tucker, 1964). Senior college students also seem somewhat more likely to express an interest in humanitarian concerns, and less concerned about practical (e.g., business and financial) matters than junior college students. Tillery's questionnaire asked the respondents to choose the one item that would give them the most satisfaction in life. "Helping others" was selected by 11 percent of the four-year group compared to six percent for the junior college and non-college group. Five percent of the four-year group selected "money" compared to eight percent of the junior college and 11 percent of the non-college group.

An attempt to develop an empirical typology of junior college student sub-cultures was undertaken by Mauss (1967). The typology, adapted with slight modifications from the one developed by Clark and Trow (1966), includes four types of student cultures:

1. the Academic, which strongly identifies with the adult community and is involved with ideas
2. the Perpetual Teenager, which does not identify with the adult community and is not involved with ideas
3. the Incipient Rebel, which is involved with ideas but not with the adult community
4. the Vocational, which identifies with the adult community but is not involved with ideas.

Mauss studied 500 students enrolled in general social science courses at a suburban junior college in San Francisco. Though not a random sample, the author contended that the students provided a fairly good cross-section of the student body; however, the basis for this contention was not made clear. The questionnaire used contained such items as social background, plans, grades, habits, and religion in addition to value commitments.

According to answers given, students were rated on an A (adult) scale and I (intellectual) scale and placed in one of the four types. The distribution among the four categories in the typology was: academic, 9 percent; vocational, 24 percent; incipient rebels, 23 percent; perpetual teenagers, 44 percent. Although a little more than half the total sample were males, three-fourths of the academic subculture were females. This led Mauss to hypothesize that such an over-representation of women might be common to junior colleges because of a greater parental willingness to send academically talented men away from home for the freshman year.

Although several of the distributions for such variables as social background, general college information, use of time, and student evaluation of teaching provide some validation of the typology, the sampling procedure and indicators in this study are not as precise as they might have been and the data are presented without multivariate or statistical tests of significance. Mauss' typology may however, if replicated with proper modifications and improvement in procedure, shed some light on the severe attrition in junior colleges. According to Mauss, the junior colleges are caught between a largely anti-intellectual and adolescent environment on the one hand and a legislative mandate to hold all kinds of students as long as possible on the

other. Two ways of holding the students are suggested by the author. One is to modify the system so that it will reach students not in the academic subculture and the other is to modify the students' skills and aptitudes in order for them to "reach" the system.

Conflicting findings concerning Clark and Trow's (1966) typology as applied to junior college students were found by Brainard (1969). In this study the typology was used to determine whether groups of student leaders participating in the four subcultures proposed by Clark and Trow had differential personality characteristics when compared with each other. More sophisticated statistical procedures were used in this study than in the one by Mauss, and Brainard concluded that student subcultures are not distinct entities which can be exactly delineated from each other. The Clark and Trow model was not empirically validated in this study. The methods employed to differentiate student leaders by sub-cultures were successful in discriminating only a very few personality dimensions. There were a number of factors where the mean differences were not significant. The conflicting results would indicate that the application of the typology to junior college students is still in the exploratory stage and further investigation is necessary.

Satisfaction with Junior College Preparation

Although Cross (1969) comments that there is almost a total lack of any systematic investigation of junior college students' reactions to their college experience, most studies made by junior colleges do attempt to assess the students' satisfaction with that experience, particularly as it pertains to job preparation. Although relatively small proportions of students indicate that their junior college experience has prepared them "very well" for jobs, the majority feel that they were prepared "adequately" (Sensor, 1964; Machetanz, 1968; Grieve, 1970a).

Knoell and Medsker (1964) investigated satisfaction with the preparation of junior college students for senior colleges. Despite the fact that the grade point averages of transfer students tend to drop the first semester, Knoell and Medsker found that students who transferred generally rated their junior college experience highly. Asked if they would attend a junior college if starting again under the same circumstances, 42 percent of the students

responded "definitely yes" and another 29 percent responded "probably yes". Other studies yielding similar findings include Grieve (1970b); Lembke (1968); Reichard (1968); Trent & Medsker, 1968; and William (1966). Students who transferred to private universities generally gave the highest ratings to their junior colleges while students who transferred to technical institutions gave their junior colleges the least favorable ratings (see Cross 1969; Machetanz, 1968).

Other Personality Characteristics

Because certain personality characteristics are less measurable than academic ability, achievement, and socioeconomic status, less is known about students' personal and psychological development. Yet one of the major goals of higher education is to promote or facilitate personal growth and development. The unique personal characteristics of students must be examined in order to determine if that goal is being achieved.

In general, junior college students are more conventional, less independent, less attracted to reflective thought, less flexible in their thinking, more authoritarian, more cautious, less intolerant, and less socially mature than university students. (Abbas, 1968; Cohen & Brawer, 1970; Cross, 1969; Gaddy, 1970; Glenister, 1969; Heist, 1960; MacMillan, 1969; Spaulding & Billings, 1969; Tillery, 1964; Trent & Medsker, 1968; Tucker, 1964.) However, both types of institutions enroll students with both high and low scores on instruments measuring these traits. The difference between the institutions is junior colleges enroll smaller proportions of the high scorers and larger proportions of the low scorers (Koos, 1970).

In reporting on his findings from the application of the OPI to high ability students in California, Tillery (1964a) found that the greatest differences between students selecting junior colleges and those choosing the state university occurred on the OPI scales measuring autonomy and authoritarianism.

Although conclusive generalizations regarding personality differences cannot be drawn from Warren's study (1966) since only three colleges were involved (a public junior, a four-year state, and a four-year private), a number of his findings have been corroborated by broader based studies (ACTP, 1966; Glenister, 1969; Medsker, 1960; Tillery, 1964a). Warren found that on

all appraised personality measures, junior college men and women differed from samples of students in the state and private college. Students at the private college were the most adventuresome, impulsive, ready to commit themselves to courses of action in a variety of situations, and more involved with other students. Junior college students were the most cautious, prudent, and controlled, and the most apprehensive and rigid in their concerns over grades and academic standing.

The majority of junior college students have been described as apathetic regarding social issues in general and student activism in particular. Although there has been no exhaustive survey of activism in the junior colleges, Jones (1968) conducted a survey based on a 10 percent sampling of institutions listed in the 1967 Directory of American Junior Colleges. He received 68 responses from colleges in 30 states. This sample indicated that student protest in the junior college has been mainly non-physical. At issue have been "student rights", such as dress codes or food services, rather than such larger social issues as civil rights or the Vietnam war.

Lombardi (1969) estimated that nationally no more than two percent of students at junior colleges are active participants in campus agitation and suggested that the reasons for moderate activism in junior colleges is due in large part to the fact that junior college students are more controllable in their conduct, less flexible in their thinking, and less mature than students at four-year institutions.

Cross (1968) noted that "taken as a whole, the research picture reveals young people who are not sufficiently sure of themselves to venture into new and untried fields, and they appear to seek more certain pathways to success and financial security [p.51]." That junior college students have a lower self-concept than do four-year college students is borne out by the research. Data from Astin, et al., (1967) show that, as a group, junior college freshmen were less self-confident than four-year college and university freshmen on such traits as drive to achieve, leadership ability, and intellectual self-confidence. Data from the ACE study indicate that although over one-third of the junior college students do consider themselves above average in academic ability, as a group they do not possess the academic self-confidence of the university freshmen.

The SCOPE questionnaire asked students to indicate their best abilities. High school seniors in the SCOPE study who later entered four-year colleges reported that their best abilities were in reading, mathematics, writing, and general academic areas. The junior college and non-college groups had larger proportions rating their best abilities as working with tools and machines, painting, sports, cooking, or sewing. When asked for self-estimates of their ability to do college work, 57 percent of those who later entered four-year colleges felt "definitely able" compared with only 29 percent of those entering junior colleges. Both the ACE and SCOPE data indicate that the academically-oriented senior college students feel confident in academic pursuits while junior college students perceive their strengths disproportionately in nonacademic areas.

Telford and Plant (1963) administered Rokeach's Dogmatism Scale (1960) and the Allport- Vernon - Lindzey Study of Values (1951) to a sample of 4,506 students who applied to six California junior colleges in the summer and fall of 1960. Their objective was to determine if there were significant changes in selected personality traits, ideologies, and values of students who attended public junior colleges.

Subjects were tested again in 1962 and subjects were then classified into three categories: those who applied for admission but did not attend classes, those who attended one or two semesters, and those who attended for three or four semesters. Thirty comparisons were made of which 27 differences were statistically significant and all differences were in the direction of higher scores, indicating that there is a general personality development apart from the amount of educational experience and this change takes place with both sexes and across all educational attainment groups. Telford and Plant concluded that within the limits of the data and study design (questionnaires were sent to the participating institutions and were self-administered) many changes attributed to the collegiate experience may be no more than developmental changes in young people which occur whether they attend college or not. According to Trent and Medsker (1968), however, Telford & Plant's study was affected by a number of limitations: only 38 percent of the original sample tested in 1960 responded in 1962, and only 32 percent of the subjects who did not attend college responded. In addition, the technique used by Telford & Plant is inadequate to test the significance of group differences on scales that are intercorelated, and should

have been supplemented by measurement of differences between the group differences. Moreover, the AVL measures hierarchy and not intensity of values. Whether the differences are attributable to normal developmental changes regardless of school attendance or college "impact" cannot therefore be made definitively from the evidence at hand.

Transfer Students

Although research on personal characteristics of the transfer student is as limited as that on the non-transfer student, several studies have investigated the impact of "transfer shock" on the academic achievement of transfer students. "Transfer shock" refers to the student's academic performance, but is also a meaningful description of his general reactions to his environment. Hills (1965) summarized the research in 20 studies of the transfer student as follows:

1. Junior college students' grades drop half a letter grade in the first term of transfer. There is a partial recovery of perhaps half this drop over the remainder of upper-division work. (Bissire, 1966; Dehart, 1966; Gold, 1969; Luke, 1966; Pearce, 1968; Rouché, 1967 also discuss this.)
2. Transfer students do not do as well as native students in overall grade point average.
3. Fewer transfer students than native students graduate.
4. Transfer students take longer to graduate than native students.

Hills hypothesized that transfer shock is probably related to some psychological disorientation caused by a number of factors. Junior college students are more dependent than four-year students. They have lived at home with parents, their adolescence has been prolonged, and they probably come to the four-year college or university with less confidence in their academic abilities than native students. Many junior college students have come to accept themselves as second-class citizens because they were not granted admission to a four-year college or university directly from high school. This attitude is often reinforced when they encounter similar perceptions at the university from admission personnel, professors, and other students. The transfer student is often disoriented by the large array of social programs available at the university and is confused by all the choices. At the same time he is influenced by his desire to belong. Yet, most student orientation programs are directed at freshmen; efforts to bring the transfer student into the "family" of the university are minimal.

In addition, the junior college transfer student often faces a host of additional problems--financial difficulties, the pressure of being admitted on probation, batteries of tests, and loss of credit hours. O'Banion (1969) summarized the plight of the transfer student as that of a "work-weary student, aware of his lower socioeconomic background, with documented evidence of his lower ability, dependent on home and community, and under financial stress." (For additional studies of transfer students see Cooper, 1967-68.)

Investigation into the kinds of counseling and orientation programs that might ease transfer shock has not yet been undertaken. More research is needed on the psychological characteristics of all junior college students so that special counseling programs might be designed to strengthen the self-confidence and promote the intellectual and psychological growth of large numbers of such students throughout the country.

Conclusions and Recommendations

The fact that junior colleges draw their students from a wide range of academic ability, motivational characteristics, and socioeconomic groups has been well established by the data. The implications for future research however, have not been as clearly drawn. Answers to several questions are still unsatisfying.

One area involves the direction of changes in junior college populations. To what extent are community colleges drawing from disadvantaged ethnic groups and are the needs of these students different because of their differing characteristics? What are the characteristics of future students likely to be and to what extent will they enter the community colleges? We need data to show systematically the ways in which the college-going population is changing along dimensions other than scholastic aptitudes.

Another research area might be the varying characteristics of the current student populations. How do students entering public two-year colleges compare with those entering independent junior colleges and what comparisons can and should be made among students entering different types of private junior colleges? What are the effects of the different college environments on students entering with different characteristics?

More than any other institution, the community college has been and seems destined to remain the most significant medium for continuing education; yet there is a paucity of information about older students and the differences in characteristics and needs of those enrolled full time or part time in academic or technical or vocational programs, and those enrolled parttime in conventional adult education courses. Clearly community colleges need data about these students in order to best provide programs suited to their special needs.

Finally, perhaps the most neglected area of research is the impact of the junior college experience on each of the various subgroups of students. In what way does that experience affect or alter the characteristics of entering students; and, more importantly, in what manner and to what extent should the junior college try to alter these characteristics in an effort to continue and enhance the student's growth and development?

Today's research corroborates that of the past decade. Speaking of groups, and comparing two-year college students with those attending four-year colleges, we continue to find that the junior college students are lower in socioeconomic status, have less academic aptitude, are less motivated academically, are less self-directed generally, understand less about their own interests and potentials, are less inclined toward leadership activities, are less open in dealing with the world of ideas and creative endeavors, are less aware of the diversity of the world of work, are more uncertain of their reasons for attending college, feel that they are less likely to complete their college education, and seem to possess lower self-esteem and sense of competency. This is a regrettable number of potential handicaps to find consistently from the first research on junior college student characteristics to the present. It definitely does not mean, however, that all two-year college students suffer from them, for research also shows many highly motivated, high achieving students among them. Indeed, the range of their abilities, aptitudes, and personality traits generally exceeds that of four-year students. Also the two-year colleges themselves differ greatly, not only in the characteristics of their students, but also in a variety of important institutional characteristics.

The mission of the two-year community college is thus unique, for it must meet the greatest educational needs of the greatest possible spectrum of the population. To open the college doors to such a diversity of students is one thing; to assume that they make use of this opportunity is quite another. Unfortunately the research on the effects of the colleges' programs on their students is much less clear and plentiful than it is on the characteristics of entering students.

Community colleges can no longer postpone evaluation of their programs and of their overall effects on the growth and development of their students. Concerted efforts must be made to implement and evaluate programs designed to meet the special needs of the less able, less motivated students as well as the highly motivated, high achieving students. A comparison of student characteristics itself is not the principal objective; differences must be detected and analyzed so that a better job of counseling, placement, and retention of students can be accomplished. Unless rigorous evaluation of all community college programs is undertaken, the "open-door" may well become a "revolving-door".

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CHAPTER 3

KEEPING THE DOORS OPEN FOR THE LOW ACHIEVERS

Roberta Malmgren

Introduction

Remedial students comprise the most numerous academically identified group in junior colleges. They are variously labelled "high-risk," "marginal," "low-achieving," "disadvantaged," or "low ability," and are considered to have deficiencies which seriously impair their ability to succeed in college-level curricula without some remedial preparation.

It is this type of student who is seeking entrance into the junior college in ever-increasing numbers. Bossone (1966) estimated that 70 percent of the 270,000 freshmen entering California junior colleges in the fall of 1965 failed the placement examination for English 1A, a college-credit English course. Although the estimates of actual remedial-course enrollments vary from under 10 percent in midwestern junior colleges (Ferrin, 1971) to a high of 80 percent in California (Bossone, 1966), many two-year institutions report that between 60 and 70 percent of their freshmen need some kind of remedial work before they can enter a college English transfer program (Freligh, 1969; Fitch, 1969). The low figure of Ferrin may reflect institutional policies of voluntary enrollment in remedial classes.

In spite of the numbers of these low-achievers, outside of a limited scholastic profile based on standardized achievement tests and/or grades, little is known about the marginal student, his special abilities and interests, and few serious attempts have been made to diagnose his problems, be they academic, cultural, physiological, or psychological. In the angry words of William Moore (1970):

No other student in higher education is subjected to the deliberate professional neglect that is shown the remedial student. There are no books written about him and virtually no research...This student is an afterthought. He is one of the academic squatters with no specific section of the institution permanently assigned to him. Educators treat him as the villain rather than the victim [p. 1].

The description and evaluation of remedial programs will be taken up in Chapter 7, but it is obvious that one of the major contributory factors involved in the failure of these programs is the almost total lack of information about low-achievers.

Characteristics of Low-Achieving Students

The only absolute common denominator of remedial students is that they have all either obtained a low score on standardized achievement tests or have low high school grades. Roueche found that 95 percent of the junior colleges in the United States use standardized examinations to place students in remedial classes (1968). The three most frequently used tests are the School and College Ability Test (SCAT), the American Council on Education Examination (ACE), and the American College Testing Examination (ACT). The cut-off percentile for identifying low-achievers varies among institutions and also according to course-level assignment.

For the lowest level remedial course, the 15th percentile or less is usually used. High school grades or rank are also frequently used in conjunction with these tests to determine the placement of students. Each college establishes an achievement profile based on one or both of the above criteria and assumes that any student fitting this profile will have great difficulty in succeeding in regular college classes, success defined as a minimum grade point average of 2.0 or "C."

There is some consensus regarding the demographic characteristics of the remedial student: he is male, young (18-19 years old), single, a high school graduate whose father is an unskilled or skilled laborer, and works while in school. (Bossone, 1966; Moore, 1970; Gold & Young, 1965; Berg, 1965)

Although the typical low-achiever is often described as coming from a lower socioeconomic background, all socioeconomic and educational levels are represented in remedial classes. The research on cultural disadvantage as a cause of low achievement scores is contradictory. Moore (1970), argues that the high-risk student "is indigenous to the total class structure [p. 25]," but qualifies this with the comment that such a student is most often from a rural or inner-city area, a graduate of a "crippling" high school.

Berg (1965) found that, relative to their proportion in the community, students from higher socioeconomic backgrounds were overrepresented in the low ability groups which he studied; and, likewise, those from lower socioeconomic strata were underrepresented in groups of low achievers, which may reflect

socioeconomic differences in aspiration. In addition, the general socioeconomic status of the community affected the sex ratio of low-ability students. In one high socioeconomic level junior college 49 percent of the low-ability students were female, a relatively high proportion since women usually comprise about 40 percent of low achievers. Berg attributed this to the fact that girls in this type of community may be under more pressure to attend college and also to the lack of immediate job opportunities in such an area. He compared the sex ratio of this college to one located in an upper-middle socioeconomic community where the percentage of low-ability females was 35 percent, a fact Berg explained by pointing to the number of job opportunities in that community, including an airforce base and government offices. Obviously, the composition of low-ability groups in junior colleges is affected by a complex of factors, not the least of them the type of community in which each college is located.

Further evidence that cultural disadvantage alone does not produce a low-achiever comes from studies which indicate that many remedial students are not, in fact, culturally impoverished (Bossone, 1966; Ferrin, 1971; Moore, 1970). In Bossone's survey of remedial English students, 91 percent said they read magazines in their homes, 78.7 percent said that they had public library cards, and 78 percent described their parents as being interested in reading. Moore maintained that many remedial students have indeed been exposed to books, trips, plays, and other experiences assumed to enhance the academic prognosis of a student.

Finally, there is the question of whether or not standardized achievement tests accurately reflect a student's potential--whether, in fact, what is being tested is merely achievement or ability. Few attempts have been made to determine so-called "low-ability" students' actual intelligence levels. Two notable exceptions are studies conducted on low-scorers in three Florida junior colleges. Both studies administered the Wechsler Adult Intelligence Scale (W.A.I.S.) to low-achievers. At Miami-Dade Junior College, 57 full-time freshmen, all of whom had scored below the 22nd percentile on the Verbal Section of the School and College Ability Test, were tested: 93 percent obtained Full Scale I.Q.'s of average or above; and 25 percent received ratings of Bright Normal (110) or above (Losak, 1969). In addition to the W.A.I.S., four psychologists inter-

viewed these 57 students and subjectively evaluated their intelligence. Forty-four percent were judged capable of functioning at higher intelligence levels than their obtained I.Q. scores. Fifty-four percent of the 57 students were considered as having the intellectual and emotional potential of completing junior college and 18 percent of obtaining a bachelor's degree.

Corroborating the findings of the Miami-Dade study is similar research conducted at Daytona Beach Junior College and Santa Fe Junior College (Florida State Department of Education, 1969). Three groups of students were chosen from these two colleges: one composed of 40 students who had scored low on the Florida 12th Grade Test and two control groups. The first control group, Group II, consisted of 23 students who had scored in the middle range of the 12th Grade Test. Twenty-seven students who had obtained high scores on the test formed Group III. All these students were given the Wechsler Adult Intelligence Scale. The range within the lowest group, Group I, was as great as that among the other two groups. In sum, with respect to intelligence, there is strong evidence that remedial students are far from being a homogeneous group and that their status as low-achievers does not necessarily indicate actual ability.

Another area which needs to be researched is the non-cognitive characteristics of remedial students. In view of the studies cited above, it appears that in many cases it is these characteristics which obstruct marginal students from realizing their potential. Several authors have drawn a general psychological profile of remedial students. Gold and Young (1965) studied students who had received low scores on the SCAT. They described the typical low-ability student in Los Angeles City College as (1) tending to defer to others; (2) wanting things to be well-ordered; (3) having little interest in assuming leadership roles; and (4) exhibiting feelings of inadequacy. In addition, this study found that low-achieving females tended to be more aggressive than respectably scoring males. Finally, these students expressed more concern for power and influence than did a control group of higher scorers. One of the problems of such a study is that the fact of being placed in a remedial program must have some effect on a student's self-perception. Are, for example, the feelings of inadequacy a result of program placement?

A fruitful, but relatively untouched, field for research on marginal students is that of emotional problems. Several studies have revealed that there is a high incidence of psychopathology among low-achievers. The two Florida studies quoted above on intelligence also gathered data on personality. In the Miami-Dade study (Losak, 1969), 93 percent of the 57 remedial freshmen achieved a Full Scale I.Q. of Average or above. But based on the Bender Visual Motor Gestalt Test, House-Tree-Person Projective Test, and individual evaluations of four psychologists, 72 percent of the students were judged to have personality and adjustment problems significant enough to impair their success in college. The two major psychological impairments identified by Losak's study were ego defects--problems of identification, role confusion, psychosexual and authority conflicts--and anxiety. This report concluded with the recommendation that 40 percent of the 57 students receive psychotherapy. Such therapy was not indicated for 14 percent due to the chronic nature of the problems and the limited resources of the college.

The other Florida study (Florida State Department of Education, 1969), conducted at Daytona Beach and Santa Fe junior colleges, included the administration of the Minnesota Multiphasic Personality Inventory to the three groups of students. There were significant differences on the Depression and Ego Strength scales, Group I (the low-achievers) obtaining higher scores on the former and lower scores on the latter scale than the two control groups (middle and high scorers on the 12th Grade Test). Another study (Capper, 1969) found low-achievers expressing depression and immature self-concepts.

As can be seen from the foregoing discussion, the research on low-achievers has emphasized the deficiencies of these students. No serious attempts have been made to ascertain their special abilities and interests. Gold and Young (1965) found that low-achieving females were especially interested in social service and clerical activities and had below average interests in outdoor, scientific, musical, and mechanical activities. Low-achieving males at Los Angeles City College expressed above average interests in social services and clerical, and aesthetic activities but little interest in outdoor and mechanical activities. Both males and females in the group of low scorers on the SCAT had average or above average ability in motor coordination and manual

de.terity but ranked lower in general intelligence, especially in verbal measurements. The dilemma is; then, that particularly for the males, low-achievers are not interested in activities suited to their abilities (mechanical and outdoor). Gold & Young suggested that low-scoring females are more likely to succeed because their interests and aptitudes overlap to a greater extent than do those of the males.

The research on low-achievers supports the contention that the interests of these students are frequently unrealistic, that their levels of occupational and educational aspirations exceed their abilities. Berg estimated that at least 70 percent of the low-ability students whom he surveyed had planned, at the time of entering junior college, to transfer to a senior institution. Fifty percent of the students aspired to professional or semi-professional careers, mainly in the area of elementary or physical education. Other authors have remarked on the high aspirations of remedial students (Roueche, 1968; Bossone, 1966; Gold & Young, 1965). Berg (1965), however, who noted the similarity of program choices between low-ability students and those in the general college population, speculated as to whether the expressed goals of low-achievers indicate a strong individual interest that will lead to disappointment, or whether such aspirations primarily reflect peer group influences, thus presenting the feasibility of more directive counseling.

There remains one final factor to be considered in studying marginal students: physiological deficiencies. One suspects that all too many junior colleges assume, as does William Moore (1970), that "...these disabilities have usually been corrected by the time a student reaches college [p. 76]." In fact, the few studies of remedial students which have concerned themselves with physiological correlates of low achievement refute Moore's opinion. In a study of students on probation at Los Angeles City College over half were either left-handed or had mixed manual dominance, nearly all had major vision defects, and 25 percent needed glasses (Capper, 1969). However, to what extent these factors were related to achievement was not reported.

At Miami-Dade Junior College, 20 percent of 57 remedial students studied had some type of organic disorder (Losak, 1969). At Santa Fe and Daytona Beach junior colleges, however, no significant differences in vision defects

were discovered between low-achievers and control groups (Florida State Department of Education, 1969).

Factors Related to Success of Low-Achievers

A research need correlated to establishing the characteristics of low-achieving students is the identification of factors which distinguish those marginal students who succeed in junior college from those who do not. Because low-achievers are so classified on the basis on standardized achievement scores and/or grades, a great deal of information on the predictive value of these criteria exists. Although standardized tests have some predictive value (Hoyt & Munday, 1966; Hartman, 1968), research indicates that high school grades or rank better prophesy scholastic success in college; and many junior colleges use both in placing or counseling their students. There is some dissension regarding the relative weight which should be assigned each of these two criteria.

Hartman (1968) studied first-time entering freshman who were on probation, so categorized because they had ranked in the lower half of their high school class and in the lowest one-third on the SCAT total score, according to national norms. He found that SCAT scores correlated more highly with academic prowess than did high school rank (1968). Ernest Berg (1965), however, found the positive correlation between SCAT scores and the college grades of low-achievers to be quite low. Berg concluded from his study of low-achiever students in the (16th to 30th percentiles) that they had a 50-50 chance of succeeding. Berry (1969) who studied a group of 162 second-chance students (those who had flunked out of other institutions), discovered that high school rank was the best predictor of success.

It should be noted that Berg's population was not the lowest group of scorers and that this fact would affect the lowered predictive power of the SCAT scores; that is, the 16th to 30th percentile would most likely include students who were less clearly low-ability. The major problem with achievement tests is that they are not diagnostic and fail to discriminate among important subgroups of remedial students with respect to intellectual potential, emotional problems, or purely composition or reading retardation. As with

the lack of data on non-cognitive characteristics of marginal students, there is a paucity of information on these characteristics as related to the success of the few remedial students who succeed in junior college.

Some demographic variables correlate with the success of the remedial student, especially age, sex, and socioeconomic status, and the correlation is in the same direction in which these factors distinguish low-achievers as a group from other students. Female remedial students have a better chance of obtaining a "C" average or better in junior college (Baron, 1968; Berg, 1965). The younger a student is, the more likely he is to fail (Berry, 1969; Capper, 1969). This second factor may partially account for the higher percentage of success among second-chance students. At El Camino College (Torrance, California), for example, 70 percent of these readmissions transferred or graduated compared to 33 percent of first-time junior college probationers (Capper, 1969). At Metropolitan Junior College (Kansas City, Missouri), however, the rate of success (2.0 grade point average or better) was only 36 percent; but those who did succeed averaged 22 years of age, while the unsuccessful students were around 20 years old (Berry, 1969).

Socioeconomic status has been mentioned elsewhere as a variable relating to a student's scores on achievement tests, and research conducted on the academic progress of remedial students tends to confirm that those from lower socioeconomic backgrounds are less likely to succeed than those from higher strata (Hall, 1968; Berg, 1965). Berg found that, in general, there was a positive correlation between the academic performance of low-ability students and their socioeconomic status.

A limited amount of research has been conducted on the attitudes of successful low-achievers. At Los Angeles City College, questionnaires were sent to 236 probationary students and 30 non-probationers to determine which attitudes might be related to academic success (Stein, 1966). After two semesters had elapsed, the probationary students were divided into "successful" and "unsuccessful" categories (above or below a 2.0 grade point average in courses other than remedial). Sixty-four students achieved a "successful" rating, and 172 were classified as "unsuccessful."

The questionnaire included three sections: (1) respondent's perception of characteristics of the ideal student; (2) respondent's self-perceptions regarding

the same characteristics; and(3) his judgment of what his junior college expected of its students. The investigator concluded that successful probationers saw both the ideal student and themselves as tending to business while the unsuccessful student stressed social activities and sports. Stein also noted that successful probationers had a greater tolerance for general education classes and less need for direction.

Motivational Factors

The most commonly cited cause of failure in junior college is lack of motivation. While the importance of motivation cannot be ignored, few attempts have been made to describe or test for it in junior college students; and even definitions of the term vary according to the user.

Generally, the literature defines motivation in terms of a student's expressed attitudes toward college--his reasons for attending as well as expectations of higher education--and overt behavior exhibited in pursuing his education--hours studied, for example.

Trent and Medsker (1968) in Beyond High School studied college persisters and withdrawals in terms of their academic motivation. Motivation was here defined as including reported importance of college, expectation of graduating, perceived values of education, and hours studied each week. Although these authors were concerned with persistence regardless of ability, the variables they used are also applicable to characterizing successful and unsuccessful remedial students in junior colleges. As cited earlier, for instance, Berg (1965) found that those remedial students who had some definite educational and occupational plans performed better than students who were undecided about such goals.

Furthermore, and not too surprisingly, the mean grade point average of those students who felt most certain of returning to college after the second semester was higher than that of either the students who were uncertain or the mean grade point average of students who had definitely decided not to enroll for a third term. Confirming the negative effects of doubt, Berg found that the students who felt sure that they would not return achieved higher grades than the students who did not know whether or not they would return.

Although Berg (1965) could find no significant differences in grades between low-ability students who stated plans to transfer and those who indicated that they were in terminal programs, he did note that achievement was lower for students who were undecided about their programs. Berg further

discovered that students who planned to stay in junior college for only one of two semesters did somewhat better academically than the rest of the students, and he believed that this could be partly explained by the fact that many of these students were enrolled in secretarial courses where grading was less rigorous and motivation higher. Again, those students who were undecided about such plans performed the most poorly.

Berg used the articulated importance of grades as an index of motivation. He found that of 532 remedial students only 32 thought that grades were of little significance, and only four felt that grades were not at all important. On the other hand, 24 percent of these low-ability students believed that they worked harder than average; the mean grade point average of these students was a full point above that of students who said they worked less hard than the average student. Since 50 percent of all these low-ability students expressed the belief that grades were of great importance, it may be concluded that the verbalized appreciation of good grades is not in itself a strong motivational factor.

Although attitudinal variables above are useful in identifying the potential drop-out, they do not contribute greatly to an understanding that might lead to applying effective prophylactic measures. Far more difficult to analyze, but also more crucial, are personality variables inhibiting motivation to learn. John Summerskill (1962) wrote, "The trouble here is that we do not know what motivational forces are actually predictive of college success and we do not know how to accurately assess such motives in students [p. 639]."

Another perspective on student motivation is that offered by need-achievement theory (Boggs, 1968). This theory assumes that people differ in their need to succeed and also in their need to avoid failure. These needs, or motivations, are directly related to the extent and intensity of effort that a person will contribute to a task. Boggs presented three variables involved in motivation: (1) motive--the tendency to attempt to obtain satisfaction or to avoid dissatisfying situations; (2) expectancy that a certain type of behavior will be followed by an expected consequence; and (3) incentive, the desirability of a goal. Boggs applied need-achievement theory to the design of a research plan for evaluation of remedial education in junior colleges. His design assumes that two motives are operating in a person: the motive to

succeed and the motive to avoid failure. In this research plan, teachers are encouraged to provide situations in the classroom which "promote motive directed behavior [p. 4]." The plan is important because it gives teachers specific instructions on how to determine and inculcate need-achievement motivation as well as directions for evaluating remedial techniques and programs.

Although the need to achieve is important to success in college, other motivations such as need-affiliation--sociability--must be considered (LeVine, 1966). Also, the type of college--whether it is primarily academic or vocational in orientation, or whether it stresses intellectual achievements or social activities--may affect a student's motivation. In Summerskill's (1962) words, "...does the student have sufficient and appropriate motivation for a specified college with specified characteristics and objectives [p. 640]."

Lastly, the effects of family background are crucial in determining certain personality characteristics such as autonomy and achievement motivation. Trent and Medsker (1968) concluded their chapter on persistence in college with the observation that successful completion of college has its basis in the student's early family environment. Particularly in junior colleges, where students often live at home, their present environment may be inimical to academic success. It is possible that in such cases, a total environmental approach, which would include collegiate living accommodations, may be the only way to reach the highly unmotivated student.

Conclusions

One of the prime targets of research in junior colleges should be the accurate identification and diagnosis of low-achievers, determining which students are truly low-ability and which are merely under-achievers. Although the body of knowledge on affective and cognitive characteristics of low-achievers is growing, it is still insufficient. Once adequate information exists, moreover, both types of low-achievers will need a kind and quantity of assistance from the junior college above and beyond the requirements of other students. The nature of reparation attempts, of course, should

vary according to the limits of a student abilities.

Researchers agree that attrition and failure rates are high among students labelled "low-achieving." And this is true in spite of a large number of remedial courses offered by two-year institutions. The problem is that, in many cases, the junior college is asked to reverse the negative educational experiences encountered by such students for the preceding twelve years of their lives. It is doubtful that all, or perhaps even most, of these young people can be academically salvaged. But alternatives must be found---be they short-term vocational training programs, intensive counseling efforts, or long-term remedial programs. And if these alternatives are to succeed, junior colleges must know more about the low-achiever than his score on a standardized test or his grade point average.

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CHAPTER 4

SALVAGING THE TALENT OF THE DISADVANTAGED STUDENT

Roberta Malmgren

Who is the Disadvantaged Student?

The education of the disadvantaged student concerns junior colleges more than any other institution of higher education. This is so because of the avowed intention of two-year schools to provide education to all who seek it as well as to their frequent location within disadvantaged communities.

Who is disadvantaged? The literature varies widely in the specificity of definitions. The Los Angeles Unified School District, for example, considers that disadvantaged schools are those found in areas where at least four of the following eight criteria obtain in the population (Major Urban Centers Vocational Education Project, 1970):

1. 25 percent or more of the families earn less than \$4000 a year in income.
2. 25 percent or more of the population cannot achieve above the 30th percentile in reading comprehension.
3. 25 percent or more are foreign born.
4. 25 percent or more families include separated, divorced, or widowed parents.
5. 25 percent or more of the buildings are in a deteriorated condition.
6. There is a high density rate per room.
7. More than 10 percent of the males are unemployed.
8. The percentage of adults over 25 years old who have less than eight years of education is higher than the district average.

Knoell (1970b), however, represents the other end of the semantic spectrum by defining disadvantage in much broader terms:

...disadvantage is everywhere, in everyone in one sense or another. It tends to be most prevalent and most serious in the cities but it is found in rural areas and even in the seemingly affluent suburbs; among Chicanos and Indians and poor whites, as well as the blacks; and in the backgrounds of some with demonstrated academic potential as well as among those without it. [p. 3]

This linguistic generosity notwithstanding, most authors, including Dorothy Knoell, agree that for the purposes of educational planning, disadvantage can often be defined in terms of one or more of three categories; racial or ethnic group, socioeconomic status, and learning deficiencies (Berg & Axtell, 1968; Brawer, 1971; Knoell, 1970b). Moreover, the first two factors gain their primary importance from their assumed causal relationship to the third category, learning problems.

The subject of characteristics and problems of students who have learning deficiencies was discussed in Chapter 3 on low achieving students. Many of the issues and research needs described in that chapter are germane to this part of the review and should be read in conjunction with it. Because there is general agreement among authors regarding the impact of background, particularly minority or socioeconomic status, on a person's educational potential, this portion of the review concerns itself with the relationship between these three factors. The definition, then, of a disadvantaged student utilized here will encompass a background which places "him at a disadvantage in academic competition..." (Authors' emphasis, Berg and Axtell, 1968, p. 14), be that disadvantage financial, motivational, or academic.

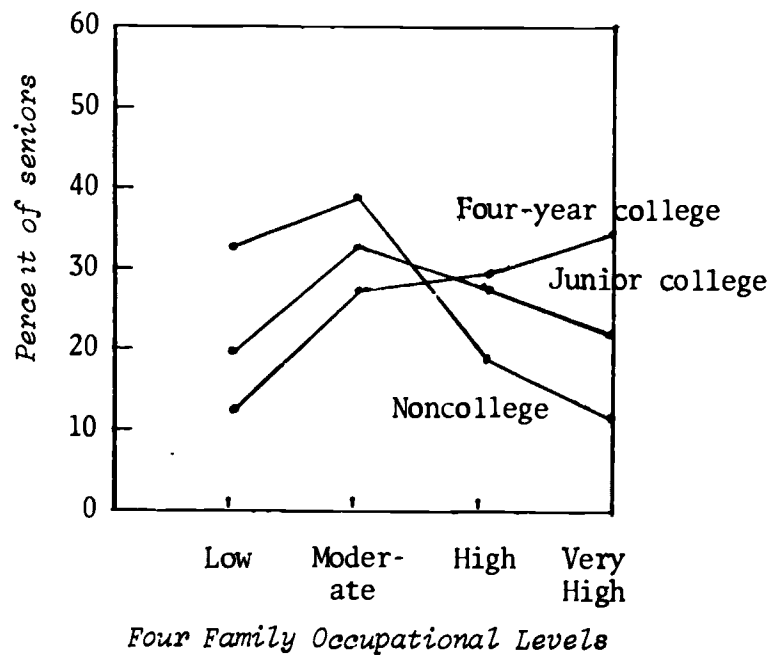
Finally, it will be noted that the bulk of the references in this section regarding minority students refer to Blacks. Although other minorities such as Mexican-Americans and Indians come under the rubric of "disadvantaged," specific literature on them is extremely limited. It is, however, possible to base some generalizations about all disadvantaged youths on the rather extensive literature on socioeconomic deprivation of Black Americans.

The Effect of Socioeconomic Status on College Representation

A primary issue in studies of disadvantaged junior college students is the extent to which socioeconomic status affects their academic potential in terms of proportionate representation in junior colleges, persistence in college, scholastic achievement, and education/career aspirations. There is consensus among authors that of all the various types of colleges, two-year institutions provide education for the largest percentage of lower income students. In The Open-Door Colleges, the Carnegie Commission on Higher Education (1970) indicated that 17.8 percent of the enrollments of two-year schools is composed of the bottom two income categories (less than \$5,000) compared to 14.6 percent and 9.8 percent respectively for four-year public and four-year private schools. At the other end of the scale they indicated in the same chart that 33.4 percent of students in two-year public institutions are from the top two income categories (over \$10,000), compared to 43.8 percent and 57.3 percent for four-year public and four-year private institutions. Medsker and Tillery (1971) reviewed several studies on socioeconomic status of college students in various types of

institutions and concluded that "public two-year college students, as a group, are from a considerably lower socioeconomic background than are university students [p. 44]." These authors, however, found that students in two- and four-year public (nonuniversity) schools come from similar socioeconomic backgrounds. (See figure below.)

Distribution of Family Occupational Levels
for Students Choosing Alternative Pursuits
after High School (1966 SCOPE Seniors)



(Source: Medsker and Tillery, 1971, p.43)

Using father's occupation as the index of economic status, Medsker and Trent (1965) found that 55 percent of their students in junior colleges came from the bottom three of nine socioeconomic status (SES) categories. Although criteria for defining socioeconomic status vary--the most common indices being

parents' educational background, family income, and father's occupation--virtually any criterion used yields the same results: students from higher SES homes more often attend four-year colleges and universities.

	Type of institution	Fathers with college*	Fathers with college+	Family over \$10,000*	Fathers--professional or management
Percentage of students from different socioeconomic backgrounds attending eight types of institutions (in rank order)	Private university	64	61	64	49
	Private four-year college	63	32	60	43
	Catholic four-year college	54		54	
	Protestant four-year college	51		51	
	Public university	49	49	49	35
	Private two-year college	39	39	42	20
	Public four-year college	34	31	33	19
	Public two-year college	34	29	40	16

*Based on American Council on Education data.

+Based on Medsker-Trent data.

(Source: Medsker and Tillery, 1971, p. 44.)

From the preceding discussion, it is obvious that junior colleges are attracting larger proportions of lower SES students than any of the other types of higher education institutions. One study (Medsker & Trent, 1965) examined how the existence of a junior college in a community affected the enrollment of various student-age populations. Sixteen communities were studied: five had public junior colleges; four had freshmen-sophomore extension centers; state colleges were found in four communities; one was the locus of a number of public colleges, and two contained no public colleges. The results of the survey showed that college attendance was highest (53 percent) among college-age youth in communities with junior colleges. The percentages for the other communities were: 47 percent in state college cities; 44 percent in the multiple-campus area; 34 percent where there were extension centers; and a 33 percent rate for the no-college communities. In communities with junior colleges, 76 percent of all college students were enrolled in the junior colleges.

When socioeconomic status is considered, the impact of junior colleges in attendance is even more striking. Using father's occupation as the index of SES, Medsker and Trent found that of low SES high school students surveyed, almost 40 percent went on to college when there was a junior college in the community, compared to 27 percent in state college communities and 21 percent who lived near extension centers.

Another variable related to SES and college attendance is that of ability. The research tends to agree that, although there is a positive correlation between ability and rate of college attendance for students of all SES groups, low SES students are proportionately underrepresented whatever their category of ability. In a 1963 study of 3,952 graduating seniors in Wisconsin, Fenske (1969) found that of high-ability students (the top 30 percent), 86.7 percent from high SES backgrounds planned to go to college while for high-ability, low SES students the rate was 49.1 percent. (Ability was determined by class rank and scores achieved on a scholastic aptitude test taken by all Wisconsin high school students.) Fenske found a corresponding decrease in percentages for all SES groups as ability levels lower. In the middle ability range (40 percent of sample), 63.3 percent of the high SES students planned to attend college while only 29.8 percent of the lowest SES students did so. Among the 30 percent of students in the bottom level of ability, 32.5 percent of the students from high SES homes expressed plans to attend college compared to 8.8 percent of the lowest SES respondents.

It should be noted that college attendance was defined in Fenske's study as plans for a four-year college or professional degree. This study was conducted to identify which students chose post-high school vocational/technical training (non-degree) compared to those entering college degree programs, the comparative results of which will be discussed later. Fenske's data reveals the general tendency of lower SES students, no matter what their ability levels, to be underrepresented in college. It should also be noted that in the ten urban communities studied, four had two-year branches of the University of Wisconsin, two contained Wisconsin State University, and three communities had technical institutes. All ten areas had post-high school vocational training facilities. None contained junior colleges.

Medsker and Trent (1965), also, found college attendance more related to father's occupation than ability. For example, among low-ability

students from professional homes, 57 percent planned to go on to college; but for high-ability students from lower SES homes, the rate was 41 percent.

A major problem presented by the situation of low SES youth is twofold: (1) unused talent of high-ability, low SES students who for financial or motivational motives do not attend college; and (2) the lower attendance rates of low ability, low SES students. Medsker and Trent (1965) found that when they compared SES, ability, and college attendance rates the rate of attendance for low SES students in junior college communities was 53 percent for high-ability, 39 percent for middle-ability, and 31 percent for low ability groups as compared to a rate for low SES students in all communities of, respectively, 41, 26, and 20 percent. These authors conclude:

The effect of the junior colleges is most noticeable among those graduates of high ability but low socioeconomic level....It is perhaps equally significant, however, that the presence of a junior college also increases college attendance among young persons in the lower ability levels, suggesting that it, more than other types of colleges, encourages high school graduates of varying ability and socioeconomic backgrounds to make the most of their educational potential [p. 69].

Nevertheless, low SES students, especially those of lower ability, are not finding their way into junior colleges in numbers comparable to higher SES students. Berg (1965) in his study of low-ability students in California junior colleges wrote, "low ability students of lower socioeconomic status do not attend the junior college in the expected proportion and...low ability students from higher socioeconomic status attend the junior college in greater than expected proportion [p. 66]."

In addition to the previously cited research, which was concerned with college attendance and socioeconomic status, several authors have investigated the relationship between SES and college drop-out rates. There is some disagreement regarding the importance of SES to persistence in college. Medsker and Trent studied the persistence rates of 4,206 freshmen who started college in September, 1959. They were able to gather data on 92.5 percent of these students the following June. Of these, 88 percent from the two highest SES levels, 85 percent of students whose fathers owned small businesses or were in sales or clerical work, and 76 percent of students from homes where the head of the household was employed as a semi- or unskilled laborer finished their first

year. Similarly there was a direct positive correlation when SES and ability were compared to persistence: the lower a student's ability and the lower his SES, the less likely his chances were of remaining in college. In fact, the percentage of low ability, high SES students who persisted was identical to that of high ability, low SES students: 82 percent.

Two other studies, however, discovered no significant relationship between SES and persistence, at least in junior colleges. A survey of survival rates of 1,700 students concluded that, although father's education and occupation did help predict persistence in four-year schools, in junior colleges the drop-out rates were not correlated to such variables (Jaffe & Adams, 1971). The NORCAL Project, a study of student drop-outs in 23 California community colleges, also reported, "It appears that low socioeconomic status...is not related to attrition..." (MacMillan, 1969, p. 35).

The subject of characteristics of persisters as compared to drop-outs is more fully considered in Chapter 5.

Characteristics of Junior College Students with Low Socioeconomic Status

Because there is general consensus on the negative effect of lower SES on college attendance rates, there is a great need to investigate the characteristics of students from lower SES homes: What academic abilities, interests, motivations, and deficiencies distinguish these students from those of more affluent backgrounds? The research in the junior colleges on this factor is extremely limited and generalizations are somewhat obfuscated by the fact that they often involve low SES groups who are also racial or ethnic minorities, a subject to be discussed later.

One study of the family income and the characteristics of 18,378 high school seniors, found that on the American College Testing battery the lowest mean scores were achieved for students from homes with incomes below \$5,000 (Baird, 1967). Self-reported high school grades, however, were the highest for this group, a fact which the author interpreted as indicating a high degree of over-achievement for these lower SES students.

A study of College of the Sequoias (Visalia, California) freshmen compared low SES students with middle SES students in terms of variables affecting the

success or failure of such students (Hall, 1968). The lower SES group consisted of 188 Mexican-Americans and 150 "Other" students, while the middle SES group was comprised of five Mexican-Americans and 495 "Others." The median scores on the College Qualification Test for Mexican-American male and female students were 20.2 and 16.3, respectively, compared to "Other" lower SES scores of 29.5 and 32.8 and to middle SES students' scores of 50.5 for men and 63.9 for women. In comparing the academic success or failure of the three major groups, lower SES Mexican-Americans, lower SES "Others," and middle SES, the author found that overall, a greater percentage of middle class students (70.5 percent) were academically successful (G.P A of at least 2.0) than were the other two groups (54 percent for Mexican-Americans and 55 percent for lower "Others").

This study disclosed some provocative findings with regard to sex. For example, for all ability levels, more Mexican-American males succeeded academically than the males of either of the other two groups. Furthermore, on the McClelland Thematic Apperception Test of Achievement Motivation, Mexican-American women achieved the highest scores of all, although their academic achievement was generally the lowest, an indication that desire to achieve does not alone insure success. Hall warned, however, that such a study does not imply that lower class students are more motivated but rather that such students may represent a self-selected group who have "persevered through twelve years of elementary and high school, often against severe cultural handicaps...[p. 6]." Hall's research yielded some relevant conclusions regarding ability and motivation of students from lower SES backgrounds, and it should also serve as caveat to future researchers: there is a need to isolate purely socioeconomic factors from ethnic or social ones.

There is much evidence that socioeconomic status also affects educational and career goals; a few studies are cited here. Baird (1967) found that among high school students who planned to go to college, 19.4 percent of those of the lowest SES backgrounds did not plan to get a bachelor's degree; the percentage for high SES students was 10.2 percent. Only 7.8 percent of low SES students planned on advanced graduate training compared to 22.2 percent of high SES students. Cross (1970) noted that 20 percent of technical and 15 percent of vocational students in junior colleges come from homes in which the father attended college whereas the remainder (80 to 85 percent) were the first in the family to attend college. Likewise, this author found, only one-third of junior

college students in college-parallel programs were from homes where the father is a semi- or unskilled worker; half of the vocational students come from such backgrounds. Fenske's (1969) study of Wisconsin high school students' academic plans showed that students of high ability but low SES were far more likely (26.7 percent) to go to vocational/technical institutes than high ability/high SES students (9.3 percent). As ability levels decreased, proportionately more lower SES students chose vocational/technical schools than regular colleges. Fenske concluded that there were two types of student most prone to go to a non-degree vocational institute: high ability/low SES and low ability/high SES.

The preceding discussion dealt with SES as an isolated variable affecting college attendance, persistence, and achievement. Although the research is fairly conclusive regarding college attendance and SES, more work needs to be conducted on persistence and especially on achievement. A related subject in the discussion of disadvantaged students concerns racial or ethnic status.

Minority Students in the Junior College

Previously, the impact of socioeconomic status on college enrollment patterns, persistence, and achievement was examined. The same question must be asked regarding social and ethnic minorities: What are the college attendance rates of minority students; do they persist with similar rates as whites; and is their achievement record comparable? This section will focus on the American Black student since more research has been done on this group than any other ethnic minority. The subject of persistence of minority students is discussed in another section.

There are few major studies of race in the junior college literature. The only area which has been fairly well documented is the percentage of minority students enrolled in junior colleges. Medsker and Tillery (1971, p. 76) summarized in table form several studies of rates of racial enrollments in public junior colleges:

<u>RACE</u>	<u>SCOPE (1967)</u>	<u>CREAGER (1968)</u>	<u>CROSS (1969)</u>
Caucasian	84%	84%	84%
Negro	8	9	8
Oriental	2	2	3
Other	6	5	(5)

These authors noted that some metropolitan junior colleges come close to representing the racial composition of the area they serve. The Carnegie Commission on Higher Education (1970) also reported that in northern and western communities, but not in other areas, minority groups were proportionately represented in junior colleges.

Dorothy Knoell (1970c) surveyed college attendance patterns of Black youth in Dallas, Fort Worth, Philadelphia, St. Louis, and San Francisco. She found that except in Philadelphia, Blacks were attending college in "fairly substantial" quantities [p. 169], although in lower proportions than whites in three of the five cities. She further found that according to high school attended, the overall range of percentages for whites attending college varied more widely than for Blacks; that is, in some schools, white graduates have a lower likelihood of going to college than Black graduates of other high schools. A major contribution to the college attendance rates of Blacks was found to be the proximity of a junior college. Knoell asserts:

The evidence is very clear that the community colleges in the five cities in the study are doing their fair share in attracting black students to their institutions. Were it not for these colleges, the college attendance rates for black students would be shockingly low. [p. 181]

In addition to her conclusion that the existence of a junior college affects college attendance rates of Black youth, Knoell also isolated several other variables affecting attendance. Dividing her sample into Black males and females and white males and females, she found a positive relationship between attendance and ability for all four groups. However, she noted that the percentage of talented Blacks who went to college was smaller than that of whites. Furthermore, the number of talented Blacks was less, reflecting, she felt, the generally lower quality of Black schools.

The high school attended also affected the propensity to go to college, regardless of race. In comparing the relationship between socioeconomic status and attendance, however, Knoell discovered that while there was a positive relationship between these factors for white students, there was no correlation for Black males. This may have been due to the problem of accurately assessing socioeconomic status. Knoell used residence in census tracts as the one criteria for SES; and, as she pointed out, there may be a wider income range in

Black areas than white. Furthermore, because most Blacks in her study fell into low income brackets, she could not make statements regarding the comparative impact of SES and race, an area in need of further research. Knoell found, furthermore, that the percentage of Black attenders from middle income homes was sometimes larger than that of Blacks from higher SES levels.

An interesting and surprising finding of Knoell's study was that in some cases the percentage of Black women in college exceeded that of white women. The gap between college attendance rates of Black men and Black women is less than that between white men and white women; and again in some instances more Black women went to college than Black men.

In addition to determining college attendance patterns of urban Blacks, Knoell's study also included interviews of 1,000 Black non-attenders, of whom 500 were given aptitude tests. A summary of the findings is listed below:

1. The non-attenders were mostly from large, poor families, where the father was absent from the home.
2. Responses toward high school were generally positive; respondents tended to assume responsibility for their high school achievement.
3. Financing college was a big barrier, though most interviewees felt that local junior college costs were fair.
4. Job goals were not unrealistically high, the primary interests being in government jobs (but not as policemen or firemen) and education, social welfare, health (women), and repair or servicing (men).
5. Money was an important criterion in job interests.
6. Forty percent had been in academic or general programs in high school and so had not received specialized job training.
7. Family attitudes toward college were generally quite positive while interviewees indicated that high school teachers and counselors had been discouraging in this matter.
8. Few students had talked to high school or junior college staff members regarding the local junior college.
9. Virtually all (98 percent) felt a need for more education, and 38 percent actually expected to go on to college.
10. Two-thirds would have chosen college over immediate employment.

Personal Characteristics of Disadvantaged Minority Students

What are the specific strengths and weaknesses, interests and aspirations of disadvantaged minority youth? The answers to these questions and to other

related issues such as the effect of a disadvantaged home environment in learning and motivation constitute one research priority. While researchers from other levels of education are concerning themselves with such problems, there is little research in the junior college on characteristics of minority students.

The study of race and/or ethnicity related to ability is a sensitive area. Scores on standardized examinations, even theoretically culture-free tests, actually reflect white, middle class American concepts of ability and potential. Lower scores on such examinations, in fact, should serve to point out the effect of the inferior education which minorities often receive. Although several studies (Knoell, 1969; MacMillan, 1971) have indicated that minority students, in these cases Blacks and Mexican-Americans, obtain lower scores on achievement and so-called aptitude tests, there is evidence that the predictive power of such tests is questionable when minority youth are considered. In an extensive review on the literature, Sampel and Seymour (1969) noted that the research is contradictory. These authors investigated both the School and Ability Test and high school rank in comparison to grade point averages of University of Missouri students. They found no significant correlation for Black males, although these two variables did predict grade point averages of Black females and white males and females. The authors felt that other factors such as the type of test and the type of school intervene in the predictive power of standardized tests for Blacks and concluded that such examinations are more valid if Blacks are compared to each other. Another survey of the literature on the subject, however, concluded that aptitude measures were equally predictive for both Blacks and whites (Johns, 1970).

A carefully conducted study--though limited due to the sample size of blacks--was that of Clarke and Ammons (1970). These investigators attempted to develop a test battery which could diagnose and identify disadvantaged students at St. Petersburg (Florida) Junior College. Their sample included 1,691 students: 37 Black males, 48 Black females, 923 white males and 683 white females. First they administered the test battery, which included two cognitive tests: the Florida 12th Grade Test and the School and Abilities Test (Linguistic, Quantitative and Total scores); and three affective instruments: How I See Myself (a self-concept test), the Social Reaction Inventory, and the Study of Values. Later they correlated first semester grades with these tests. They found that

the SCAT Total and Florida 12th Grade scores predicted significantly the grades of all white students, but for Blacks only the Linguistic section of SCAT predicted academic success or failure and this was only for Black women. No cognitive scales were valid predictors of the success or failure of Black males. Furthermore, for Black men, only one variable in the affective battery, the autonomy section of How I See Myself, predicted success. For Black females both cognitive and affective variables were related to academic success. In short, these investigators concluded that attitudes towards oneself and one's environment were significantly related to scholastic achievement. While these studies are only a beginning, they point the way to further research on the disadvantaged, not for purposes of selection but rather for identification and diagnosis of disadvantage and also as a means to improve program planning. Furthermore, they warn against an over-reliance on standard pencil-and-paper tests for determining a disadvantaged student's educational future. Not the least of his problems are reading deficiencies, inhibitions when time pressures exist, and a lack of motivation. Such concern assumes, of course, a commitment by junior colleges actively to help disadvantaged students.

Dorothy Knoell (1970c), who believes that junior colleges are attracting a sizable number of Blacks, wrote, "The problem then appears not to be one of recruitment, but of insuring successful performance after admission [p. 18]."

Special Programs for the Disadvantaged Student

In spite of the limited amount of research conducted on the needs and characteristics of disadvantaged junior college students, two-year institutions are developing an increasing number of courses, programs, and policies for these students. In a 1968 survey of programs for the disadvantaged in California junior colleges, Berg and Axtell (1968) were able to group such programs into three major categories: block programs, primarily remedial in orientation; supplemental student services, often aimed at minority students and offering special tutoring and counseling, free lunches, job placement, transportation money, and a "home base" area; and revision of administrative policies, affording greater flexibility in application and registration procedures as well as a restructuring of grading and probation practices. In addition other kinds of pro-

grams, such as ethnic studies, are on the increase. Though the subject of remedial programs is covered in another section of this review, a review of some programs specifically designed for minority students is presented below.

The American Association of Junior Colleges (1970) has compiled an anthology of Junior College Journal articles on programs for the disadvantaged. Two typical programs are FOCUS and the College Discovery Program. FOCUS (Fellowship of Concerned University Students) is a Harvard-based organization of undergraduates who work with former Upward Bound students (Strauss, 1970). FOCUS finds host families for these students in various junior college communities. In 1968, its second year, FOCUS placed 86 students in 25 colleges throughout the U.S. The project, in addition to securing host families for the Upward Bound students, works with each community to obtain support, both financial and moral, for its students.

The College Discovery Program is an experimental program for disadvantaged students at Bronx Community College (Wilkenson, 1970). Started in 1964, this program required its first 120 students to take, prior to their first term, a six-week summer session which included remedial courses and special counseling. In the fall, they enrolled in regular classes and received intensive counseling as well as being given tuition, books, lunches, and carfare. Of these 120 students, 60 percent were Blacks or Puerto Ricans. Their high school averages ranged from 63 to 89 and the I.Q. span was from 69 to 135.

In spite of this apparent diversity, the recruitment criteria for the College Discovery Program points up a common bias of attempts to help the disadvantaged. The students who were accepted had been nominated by their high school counselors and principals and screened by staff from the City University of New York and the New York City Board of Education. Qualities sought in candidates for the program included evidence of leadership, creativity, and ability to do college work. Wilkenson (1970) described the College Discovery Program students as "highly motivated, hard working serious young people [p. 37]." The problem with many such programs is that the criteria and recruitment policies virtually insure that the disadvantaged young people most in need of encouragement and support will remain neglected.

Junior colleges have not limited themselves to helping disadvantaged young people: a number of programs are designed for adults. At the City University

of New York, for example, a Social Service Technology program has been developed for adults (Moed Carroll, & Stewart 1970). As case aides with the city's Department of Social Services, these students work 17½ hours a week and receive a full salary (\$5200 in 1969) while in school. At the same time, they attend one of two community colleges, taking courses in liberal arts, Spanish, and vocational training. The students work towards an associate degree, which takes two and a half to three years to achieve, receiving salary increments after completing 21 and 46 credits of college work. At the time of writing, the author noted that of 148 students enrolled in the program, only 20 had withdrawn.

In Oakland, California, the East Bay Skills Center was organized by the Peralta College District (Michie, 1970). The Center was organized to train hardcore unemployed citizens in the Oakland area. Training is offered in over 30 occupations, from cooks to mechanics, and varies in length from 17 weeks to a year. Of some 1,000 students, 80 percent had been placed in jobs.

A burgeoning type of program related to the education of disadvantaged is ethnic studies. Lombardi and Quimby (1971) surveyed Black studies programs in junior colleges. Questionnaires were sent to the 807 members of the American Association of Junior Colleges, 80 percent of whom responded. Forty-five percent indicated that in 1969-70 they had offered at least one course in Black studies; and 31 percent stated that since the middle of the 1960's greater stress had been laid on Black studies within courses. Black studies in junior colleges are a recent phenomenon. Before 1965 only ten schools had offered such courses (usually in Afro-American or African history or culture). Even by the spring, 1967, only 23 junior colleges had done so. This number doubled to 47 in 1967-68, and by the spring of 1970, 195 two-year colleges included Black studies in their curricula.

More California junior colleges offered Black studies classes than any other state's schools. Seventy-five percent of the Californian respondents had such courses in 1969-70 compared to 64 percent in the Middle States, half of the New England schools, 60 percent in the Northwest, one-third in the North Central United States and only 25 percent of the Southern junior colleges. Black studies classes are more likely to be found in large institutions; but, surprisingly, the size of the Black enrollment does not seem to be a significant factor in the offering of ethnic courses

Moreover, a few junior colleges now exist which are primarily or exclusively devoted to Black perspectives and Black control. The most prominent of these is Malcolm X in Chicago, with an enrollment of 5,000 (Time, 1971). Malcolm X, previously Crane College, is headed by a Black president, Charles G. Hurst, Jr., and has a faculty which is 60 percent Black. In addition to a heavy emphasis on ethnic studies, Malcolm X is greatly involved in improving the conditions of its community. To that end, it runs a day care center, a weekend college (with an enrollment of 1,000 students), and extension courses in a nearby reformatory. In addition, Malcolm X, located in an area where a number of medical facilities have been built, offers a number of courses leading to employment in health services. One index of the school's success is that the drop-out rate is less than 10 percent each semester.

Ethnic studies for other minority groups lag behind efforts made to promote Black courses. For example, most Mexican-American studies classes in California junior colleges were started only as recently as Fall 1969 (Cheeves, 1969).

Although evaluations of programs for the disadvantaged are infrequent and limited in scope, a number of authors have posited requisite characteristics of effective programs. Obviously, money is a major obstacle with economically disadvantaged students and, therefore, junior colleges should be prepared to assist these students financially. Furthermore, junior colleges need to reevaluate major administrative policies, such as registration procedures and grading, if they wish to attract and retain disadvantaged students. This, of course, hinges upon their willingness to help, and as Dorothy Knoell (1970b) wrote regarding disadvantaged young people, "A climate of acceptance is still in the process of being created on the campuses...[p. 10]."

The staffing of courses with people who can relate to minority students is another crucial need. A Fall 1967 survey of California junior colleges revealed that although only 74.2 percent of their students were white, 94.3 percent of their faculty members and 97.8 percent of their deans were white (Berg & Axtell, 1968).

More experimentation with placement tests must be conducted, especially in the area of special interests and aptitudes. Knoell's survey (1970c) pointed to the greater concern of minorities with social service activities and health occupations. Brawer (1971) stated:

To improve self-image and to reinforce motivation, a comprehensive program must give the student a chance to experience some success in his learning. Disadvantaged students need options that they can visualize as real opportunities [p. 2].

In program planning terms, offering courses in areas like social services or health may do more than merely attract more minority students; such an effort may keep these students in school, reducing the generally higher attrition rate for these groups. The chapter on attrition deals with this topic.

Berg and Axtell (1968), summarizing the programs for the disadvantaged surveyed in California junior colleges, conceded that it is impossible and undesirable to establish any one program model. They, furthermore, noted that of the programs studied:

The programs which appeared empirically to be more successful than others were those which had been designed specifically to meet the particular needs of the disadvantaged student in a given community. Thus, although the experience of other colleges should be studied in detail, each college planning to establish a program for the disadvantaged students in its community should begin with a community survey and a thorough study of the particular needs of the disadvantaged students in that community [p. 37].

Whatever course of action a junior college takes to assist minority members or students from lower socioeconomic backgrounds, feeble gestures will be of no use. Berg and Axtell warned:

Since the junior college is the institution of higher education which has accepted the major responsibility for the education of disadvantaged students, it is important to understand that the junior college enrolls many such students after they have experienced twelve years of cumulative deficit and the concomitant deterioration (of) attitudes toward academic work, perception of self, intensity of motivation, and level of aspirations. Truly, junior college programs of compensatory education for disadvantaged students must be potent indeed if they are to have any effect upon the achievement of such students [p. 4].

Conclusions and Recommendations

Research on the effect of disadvantage on enrollment in college is fairly conclusive: whether disadvantaged is defined in socioeconomic, aptitudinal,

or minority status terms, students who can be so labeled are less likely to attend college than higher SES, white students with known academic potential. Furthermore, it is known that junior colleges are admitting disadvantaged students in greater proportions than other types of colleges. Because of this fact, it is especially important that junior colleges be concerned with research on the impact of family background on learning abilities and motivation. This environmental factor, combined with what Berg and Axtell (1968) referred to as "twelve years of cumulative deficit", means that two-year institutions may have to radically revise program planning and administration policies.

Although such courses as health services or mechanics may hold the hope of a better standard of living for disadvantaged young people, there is the danger that many students with potential for a four-year or graduate degree will complete only vocational/technical training. Such a possibility may be averted by intensive recruiting drives, an improved battery of diagnostic tests, and sensitive counseling. Most writers agree that to help the disadvantaged, junior colleges must put forth a massive effort. To quote Dorothy Knoell (1970b): "...colleges should probably forego attempts to serve disadvantaged youth of college age unless they are prepared to back up their offer of admission with a full complement of services [p. 4]."

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CHAPTER 5

STUDENTS WHO LEAVE

Robert J. Fitch

Student Attrition in the Junior College:

Much of the literature on junior colleges is devoted to the problem of attrition. As will be described later, many studies have concluded that the persistence rates of junior college students is far less than ideal. Researchers have been concerned not just with attrition rates but also with causes of withdrawal. Thus they have investigated institutional variables affecting withdrawal rates or the "holding power" of the school and also student variables such as sex, age, ability, grade point average, personality characteristics, self-reported reasons for leaving school, and attitudes toward college experiences.

In the following discussion of attrition, the reader can discern a major difficulty in understanding the problem of attrition and in comparing findings: definitions of what constitutes withdrawal vary. Some authors calculate attrition rate by merely counting all students who enroll one term but do not enroll the next. In other cases, the ratio of sophomores to freshmen is the index of attrition. Even for those students in attendance for two consecutive years, total units completed is sometimes used as a possible measure of attrition in terms of courses dropped or failed.

In all too many cases, attrition figures include transfers to other institutions; and in some studies, even students who graduate with Associate of Arts degrees constitute a proportion of the attrition rate! The term "attrition" means a wearing away and the implication should be that students who are counted as part of an attrition rate have not left solely of their own accord, but that, in fact, that institution has failed them in some manner. Surely if a student obtains a degree or transfers to a senior college or completes a nine-month welding course, that is, if he accomplishes his goals, then the school has succeeded and should not consider him to be a dropout.

In other words, reports of attrition rates are of little value if we do not know why students have left the institution. This is even more important in junior colleges, where many short-term courses, are offered. Academic dismissals should be included in attrition rate; those dropping out in mid-semester most likely did not do so because they had achieved goals and so could be justifiably considered as cases of attrition. But if schools are to use attrition figures in a constructive way to help students who need it, they must recognize causes of withdrawal and not include in attrition figures those students who have successfully

attained their own goals.

The review which follows is divided into two major sections. The first covers longitudinal studies of persistence and withdrawal, particularly data on overall attrition rates, patterns of attrition, institutional differences in rates, and some comments on characteristics of those who withdraw. The second part focuses on these characteristics in comparison to those of persisters.

Longitudinal Studies of Attrition

The literature on attrition examines the performance not only of unsuccessful students as measured by attrition rates, but also of "successful" students as indicated by such factors as transfer rates, units completed, and degrees earned. There are two methodological variations: (1) studies that examine the records of students who enrolled in previous years, and (2) longitudinal studies that follow the same students over time.

Research on attrition in junior colleges is not new. Two early studies of long-term performance of junior college students were discussed by Eells (1931). One of these studies by Hannah, in 1929, examined the performance of three entering freshman classes from 36 junior colleges between 1923 and 1927. Hannah evaluated performance by checking records two years after entrance. He found that 36 percent had graduated from the junior college they entered and 19 percent had transferred at the end of one year. The total retention rate over the two years was 55 percent. Retention rates varied considerably for different institutions. Institutional size was not significantly related to retention, and private schools had better retention and graduation rates than public colleges.

Eells quoted another study, by Hale in 1930, which compared the holding power of junior colleges with four-year schools by checking the percentage of freshman who returned to the same school as sophomores. His results indicated that the retention rates of the junior colleges compared rather favorably with the four-year schools, the former being 54 percent and the latter 66 percent. In more recent studies, from 19 percent (Sensor, 1967) to 23 percent (Crieve, 1970) of freshman withdrawing after one year were found to have transferred to another school. A study at Merritt Campus, Oakland, California, (1963) re-

ported that 22 percent of 1,463 freshman had been dismissed at the end of the first year because of low grades. Brooks (1967) reported that 24 percent of the freshmen in his sample at Shasta College (Redding, California) were on academic probation at the end of their first year.

Eells (1931) noted that the freshman/sophomore ratios in California for the years from 1925-26 through 1928-29 ranged from 52 to 74 percent. Recently the California Joint Commission on Higher Education (1968) stated in its report that:

For the junior colleges, in part because of their lower requirements and the fact that many students enroll for curricula which takes only one year to complete, the gross attrition rates between the freshman and sophomore years are more striking. The junior colleges have experienced larger declines in already low persistence rates. The sophomore/freshman ratios have declined from .570 to .360 for full time enrollments. If these declining persistence rates were complemented by increasing rates of transfers from junior to senior colleges, there would be far less significance. This is not the case. The total number of transfers from junior colleges as a percentage of junior college enrollments has been decreasing over a period when the ratio of vocational to academic students in the junior college has been quite stable [p.23].

Thornton (1966) also reported that nationally the freshman/sophomore ratio in 1961 was 51.5 percent and in 1962 it was 50.6 percent.

The studies mentioned above relied on sophomore/freshman ratios as a measure of persistence. However, the validity of this approach has been frequently and justifiably questioned (California Coordinating Council for Higher Education; Eells, 1931; Medsker & Tillery, 1971; Thornton, 1966). Many junior college students take several semesters to reach sophomore standing because they are either part time or fail to complete 30 units in one year. Many others achieve their objective in less than one year and a large percentage transfer or withdraw during the first year. Accurate data on persistence can only be obtained when one examines the performance of a sample of junior college students over a period of time, the longitudinal approach mentioned above.

One of the most thorough and comprehensive longitudinal studies of the junior college was conducted by Medsker (1960), who gathered data on 17,627 students at 63 institutions from 1952 to 1956. All were "regular day students" as defined by the institutions themselves. Each institution kept control cards

on these students that included information about their aptitude test scores, the date and reasons they withdrew, the date they graduated, how many transferred to a four-year school, and how well they performed at those institutions. The sample included 11 private and 52 public institutions. Approximately 98 percent of the students were enrolled in public institutions.

Medsker concluded that "for most students the two-year college was a terminal institution [p.92]". He found that at the end of four years only 33 percent of the students had transferred to a four-year school. About 35 percent had graduated with an A.A. degree and 56 percent of these transferred. Approximately 40 percent of those who transferred did so without earning an A.A. degree. The total of "successful" students who transferred without a degree or earned a degree was about 48 percent of the sample. Of course this percentage does not include those who earned a certificate, completed an occupational program without graduating, or returned to school at a later date.

Medsker also found considerable variation between institutions in terms of the number of graduates and the percentage of students who transferred. Private institutions had a 42 percent transfer rate, while only 33 percent of students in the public schools transferred. Private institutions (excluding extension centers) graduated 58 percent of their students in the four-year period; public institutions, 32 percent; and technical institutes (both public and private), 65 percent.

The difference between public and private institutions is not surprising, in view of the fact that many more private schools emphasize academic programs and have more selective admissions policies. What is surprising is the large difference among public institutions in the number of students transferring. Medsker found that in the 52 public institutions the percentage of students transferring ranged from 10 to 69 percent. In terms of graduates Medsker found even larger differences among the public schools. The percent of students graduating ranged from 11 to 81 percent, with a mean of 35 percent.

In both transfer and graduation rates Medsker found men somewhat more successful than women. Fifty-eight percent of the men graduated, compared to 50 percent of the women. Of students transferring, 36 percent were men and 30 percent were women.

Medsker also checked the relationship between ability and the percentage

of graduates in terminal and transfer programs. His sample included 6,200 students from 31 schools who used the American College Entrance Test (ACE) or an equivalent entrance test. He found that students who transferred or graduated had significantly higher test scores. The difference in test scores of graduates and non-graduates was significant at the .0001 level. The same was true for graduates who transferred versus graduates who did not ($p < .0001$). He also found that terminal majors had lower mean test scores, but that the standard deviation and range of scores of the terminal students were larger than those of the transfers. Ability is therefore not only related to the program a student selects, but also to his chances of graduating and transferring.

Trent and Medsker (1968) found that motivational factors were more important in persistence than either ability or socioeconomic status although the significance level for their sample was not as large as Medsker's earlier study (1960). The motivational differences between terminal and transfer students who succeed or fail in the junior college is an area that needs further study. How often failure is due to ability, socioeconomic factors, parental support, or motivation is yet to be determined. Though most of the studies reviewed in this report have described dropouts in terms of these variables, the results are usually reported in simple percentages. Few studies have analyzed the relative importance of these variables as causative factors in attrition or their interaction with other student or institutional characteristics.

In discussing the wide range of differences in numbers of students who transfer or graduate, Medsker (1960) noted that most of the public institutions in his sample were comprehensive institutions where between two-thirds and three-fourths of the students plan to transfer when they enter and that this was true regardless of the number or type of terminal programs the school offered. In view of these facts he concluded that:

It may be that the junior college plays an important role in causing students to become more realistic about their goals and in screening those who should not continue in college beyond two years. On the other hand, it may be that junior college fails to encourage many able students to continue with a baccalaureate program and thus is derelict in this responsibility [p.92].

Medsker also emphasized that the failure of so many students to either transfer or graduate "has serious implications for counseling." This problem is ap-

parently becoming more serious as time passes. In a more recent study, Trent and Medsker (1968) found that the number of students who actually transfer decreased slightly. The California Joint Commission on Higher Education (1968) found the number of students enrolling in California junior colleges has increased nearly 50 percent in the last 10 years, but the proportion transferring has increased only 11 percent. Recently nearly two million students were enrolled in two-year colleges in the United States and by 1975 the figure is expected to reach three million (Medsker & Tillery, 1971). If more than two-thirds of these are "transfer" students and less than 50 percent of them ever transfer, then over one million students will fail to reach their objective.

Medsker recently completed another national study of junior colleges covering the period from 1961 to 1965. Though the complete study has not been published some of the preliminary findings have been released (Medsker & Tillery, 1971). The new study examined the progress of 22,322 students who first enrolled in 1961 in 57 colleges in 21 states. At the end of four years, fifty-four percent had withdrawn with less than 60 units and about two-thirds completed no more than one year. About one-fourth of those who left had transferred to another institution, and, of course, many left because they achieved their goals in less than two years.

Another major longitudinal examination of the educational progress of students is the follow-up study of 10,000 high school students by Trent and Medsker (1968). The study involved extensive testing of graduating seniors in 1959, and follow-up studies (by mail and interviews) periodically until 1964. The sample was drawn from 16 communities throughout the Midwest, California, and Pennsylvania. At the end of one year about 40 percent had entered college and of these 35 percent had entered some type of junior college (Medsker & Trent, 1965). By Fall 1960, 22 percent of the 1151 students who entered a public two-year college were no longer enrolled in school. The highest attrition rate (25 percent) was for junior college students in terminal majors. The over-all attrition rate for all types of institutions was 17 percent, but the attrition rate in the public two-year colleges compared favorably with the public four-year colleges, who lost 21 percent of their students at the end of the first year.

In 1963 the educational status of the students was checked in a follow-up

survey (Trent & Medsker, 1968). The authors found that 35.2 percent of all the junior college students either had completed a bachelor's degree or were still in school. Trent and Medsker reported that the percentage of students transferring to four-year schools was 54 percent for the extension centers and 42 percent for the other junior colleges. This transfer rate is somewhat higher than found in Medsker's (1960) study; however, the sample was smaller and also probably did not include as many two-year technical junior colleges. Of course, many of the students who were "no longer in school" were terminal students who had completed their program at the junior college. Unfortunately, the number of junior college students earning A.A. degrees or certificates, or completing two years of work without transferring is not reported separately for students who started in the junior college.

Several studies have shown that between 65 and 75 percent of the students entering junior college plan to transfer and only about one-half of these succeed (Medsker, 1960; Cross, 1968). The follow-up studies dealing with the subsequent activities of these dropouts (including the work of Trent and Medsker) are discussed in detail in another section, but in general only a small percentage of students who fail to earn a degree or certificate and complete less than two years leave because they obtained their objective. Only a few of these students change to a major that is more appropriate for them in terms of their ability and only a small percentage of transfer majors change to a two-year occupational program, even though they are failing in their transfer program (R. J. Fitch, 1968). Trent and Medsker studied a group of California junior college students who did not transfer or complete two years and found that only 15 percent took courses that prepared them for future employment (Trent & Medsker, 1968).

At any rate, even when the number of degree and certificate students are excluded, the attrition rates in the sample of junior college students studied by Trent and Medsker were 52 percent over the four-year period. This is considerably higher than the attrition rates for students who entered four-year colleges. In their studies 3,913 of the graduates entered college. Sixty-five percent started in four-year colleges and only 39 percent of these were no longer in school in 1963.

Several individual colleges have conducted studies of the long-term activities of their students. One of the most comprehensive studies was conducted at Merritt Campus (1963). This study examined the performance of 1,476 first-time

freshmen who enrolled in the fall of 1960 over six complete semesters and also checked how many enrolled for the seventh. About one-half of the sample were part-time students. At the end of the three-year period, 10 percent of the students (n = 143) had transferred to a four-year school, and 4.4 percent (n = 65) transferred to another junior college or technical school. Many of these students transferred to another college in the district to take one of the vocational programs offered at that college. During the three-year period A.A. degrees were earned by seven percent of the students (n = 97). About 60 percent of the A.A.'s were in academic areas and 40 percent were occupational. Over one-half of the students took five or six semesters (excluding summer sessions) to earn their degrees. Another eight percent (111 students) earned 60 units or more, but did not apply for the A.A. That junior colleges are not really two-year institutions for most students is shown by the fact that at the end of two years only 21 students (1.4 percent) had earned an A.A., and only 20 percent had completed four semesters. In the first two years the average student had completed only 46 units and only three percent of the 1,463 students had completed 60 units.

In the junior college the attrition rate is greatest between the second and third semester. On the average, between 70 and 80 percent of the full-time students who enroll in the fall complete the second semester (Brooks, 1967; R. J. Fitch, n. d.; Gold, 1970), but the number re-enrolling for a third semester ranges from 46 to 53 percent (Brooks, 1967; R. J. Fitch, n. d.; Hadel, 1967). This means that 25 to 35 percent of the students finishing the second semester fail to re-enroll for a third semester.

One of the main reasons many students fail to enroll for a third semester is that many students finish their first year with less than a "C" average and are placed on academic probation or are dismissed. In the Merritt Campus (1963) study 22 percent of the students finishing the second semester were academically disqualified and another 20 percent were on probation.

Gold (1970) reported that 47 percent of the students who completed two semesters had less than a "C" average, but by the fourth semester the percent with a grade point average below 2.0 dropped to 28 percent. Brooks (1967) reported that 24 percent of his sample of freshman finished the second semester with every grade point average under 2.0; and R. J. Fitch (n.d.) found that 80 per-

cent of the students who completed less than 30 units had a grade point average below 2.0, but only 17 percent of the students who earned 60 or more units had less than a 2.0.

Gold (1970) examined the persistence of a sample of 397 students who first enrolled in Los Angeles City College in the fall of 1967. The sample was randomly selected from the records of 5,398 students who entered that fall and took the SCAT test. Records were examined to determine how many semesters the students completed (excluding summer sessions), their final grade point average, and how many earned an A.A. degree. The study, which covered a five-semester period, analyzed performance in terms of sex, ethnic group, and SCAT scores. The number of semesters completed by the students were not continuous nor were they enrolled full time every semester. The results were also compared to a similar study that examined the performance of students over a four semester period between 1958 and 1961. The table below shows the gross persistence rates and number of degrees earned for the two total samples.

Semesters Completed and Degrees Earned

	Semesters Completed					A.A. Degrees Earned	
	1	2	3	4	5	By 4th Semester	By 6th Semester
Fall 1958 (N = 430)	87%	64%	41%	26%		12%	
Fall 1967 (N = 397)	90%	71%	48%	39%	16%	3%	12%
Percent increase in persistence in the 1967 study	+3%	+7%	+7%	+13%			

(Source: Gold, 1970)

Overall the persistence rates in 1967 are higher than those of the 1958 study. One reason for the increase in persistence in the 1967 study was due to the fact that the persistence rates of the students in the lower quintiles in the 1967 study were much better than those of the 1958 sample. Gold hypothesized that this change was in part due to the success of several programs developed in the 1960's for low ability students.

Gold noted that the developmental studies program keeps the students in school for the first semester and encourages him to enroll in the regular program in his second semester. However, at that point the student finds the work harder so that for the lowest quintile the drop between the second and third semester is quite large. However, those who succeed in the second semester and continue on to the second year persist as well as students with higher test scores.

Gold also found that age was not significantly related to the earning of an A.A. degree nor was previous college attended related to either persistence or the earning of an A.A.

Fitch (n.d.) surveyed the performance of 200 full-time students who first enrolled in Cerritos College (Norwalk, California) in the fall of 1964. The results of the study are similar to those in the study conducted by Gold in spite of the fact that Los Angeles City College has a very large minority population and has many more students from the lower socioeconomic levels.

Of those students who completed the first year, 81 percent returned to enroll for one or more additional semesters. Many of these students were enrolled part time in these additional semesters, but the fact that so many do continue even though they "drop out" for one or more semesters indicates that the studies of junior college student performance cannot be limited to enrollments over one or two semesters.

The drop-out rate for the first semester was 5.5 percent, less than the 10 percent rate reported by Gold and the 7.5 percent reported by the NORCAL project (MacMillan, 1969). The number of students who enrolled but failed to complete a regular semester was rather high. The number of students who enrolled in four or more regular semesters was 47 percent, but the number completing four or more semesters was only 39.5 percent. The number enrolling in two or more semesters was 85 percent, but the number completing two or more was 78 percent.

In the sample, it was found that 30 percent of the students were academically dismissed at least once and 12.5 percent were dismissed two or more times. A large number of students stay in school but earn failing grades semester after semester. They are not dropouts, but they can hardly be considered "successful" students. As noted in the Merritt study, the majority of the junior college students who transferred to a four-year school were either eligible or nearly eligible to enter the four-year college when they graduated from high school. Similar data was reported by Tillery (1965) on students who transferred to the University of California. Over a period of several years, approximately 50 percent of the students who actually did transfer were eligible to enter the university when they graduated from high school.

In summary, dropout rates are high at the end of the second semester; and transfer rates, degrees earned, and persistence into the second year seem to depend very much on the student's ability, his achievement in high school, and his ability to maintain a passing grade point average.

The studies discussed above all reported that about 50 percent of the students in the first year were earning less than a 2.0 and many were being academically dismissed. Yet very few students who withdraw mention academic problems or failure as a reason for their withdrawal. It is, of course, quite possible that in many cases both failure and withdrawal are caused by some other problem, such as work or illness. However, the low grades reported in the above studies cast considerable doubt on the validity of responses one gets when the student himself is asked why he withdrew.

A few other studies have reported some statistics on long-term performance. A survey at San Joaquin Delta College (N. Fitch, 1966) reported that over a five-year period the number of day students returning to register the third semester ranged from 37.8 to 41.8 percent. Over 50 percent of the day students had enrolled in a previous year, about one-fifth had first enrolled two years or more before that semester (Fall 1965), nearly 5 percent had first enrolled in the 1950's. Nearly one-quarter of the evening students had first enrolled four or more years before that fall semester.

Hadel (1967) did a study of the records of a random sample of full-time day students at Pierce College (Los Angeles). The 231 students in the sample were first enrolled in the fall of 1964 and their performance over a two-year

period was examined. Eighty percent of the sample were transfer students, a figure larger than found at most comprehensive two-year schools. Hadel found that 52.8 percent returned to enroll in the third semester. At the end of four semesters 7.4 percent either earned the A.A. degree, or qualified for it but did not apply. Transcripts for other schools (either two-year or four-year) were requested by 21.6 percent of the sample. Twenty-nine percent were still enrolled in the third year and 42 percent had dropped with no evidence of further college attendance.

Brooks (1967) did a study of a group of 863 first-time freshmen who were full-time students (12+units) at Shasta College (Redding, California). Of the 863 who started in the fall semester, 126 (14.6 percent) dropped or did not continue into the spring. Of the 737 who started in the spring, 124 (14.4 percent) dropped, leaving 613 or 71 percent of the original group finishing the second semester. Of those that dropped in the spring, 43 percent had earned less than 2.0 G.P.A. in the fall semester. The next fall, 43.8 percent of the 863 students returned; but, excluding students who were enrolled in one-year programs, the return rate for the third semester was 46.1 percent. Brooks also did an analysis of the number of students in each major field that returned for the third semester. The number of students in most majors was too small to be reliable, but by grouping the majors into broader general categories such as "social sciences" it was possible to find a number of groups where the number of students was sufficiently large (40 to over 100) to justify using the data. Brooks noted that both business administration and the two-year business programs had the lowest rates of return. The reasons for this are not known, but Matson (1965) found that secretarial science majors had a high attrition rate, perhaps due to employment or marriage. Trent and Medsker (1968) also reported that the attrition rate for women who planned a two-year program was very high as compared to women in academic programs. Only 16 percent of the women in occupational programs persisted, compared to 50 percent for women in academic areas. They also report that for four-year college students, business majors had low persistence rates and that this was especially true for women. Only 16 percent of the women in business persisted for four years.

The low rate of persistence for the humanities and arts is difficult to explain, but Trent and Medsker reported that humanities majors had one of the

lowest persistence rates among academic majors. Also, the return rate for students who were undecided or in the general education group was higher than one would expect in view of the findings of other studies. Matson (1965) and Bossen (1968) among others report that "undecideds" have significantly higher attrition rates than other students.

Tillery (1965) reported the results of a study conducted at an unidentified California school; the sample consisted of 952 students who first enrolled in the junior college in the fall of 1961. Whether they were all freshmen or full-time students was not reported. Performance was determined by the number of semesters the students started over a two-year period. The students were classified according to the type of program they took in high school and whether or not they were eligible for admission to either the university or state college when they graduated from high school. The study also examined persistence rates for students enrolled in various levels of English.

The differences in survival rate for the groups with different patterns of high school preparation was consistent with what one would expect. A smaller percentage of the students with a non-college prep high school program continued beyond the first semester, and a much smaller number enrolled for three or four semesters. A large percentage of the university eligibles and the higher level state college eligibles continued to enroll for a third or fourth semester, but the withdrawal rates for the other groups after two semesters was very large. For the groups that were ineligible for a four-year school the drop rate between the second and third semester was over 25 percent. However, as shown in other studies the withdrawal rates for those students who enroll for a third semester are very low. The high withdrawal rate at the end of the first year plus the low survival rate for the remedial English classes indicate that attrition in the junior college had much to do with academic achievement.

Jaffee and Adams (1971a, 1971b) did a follow-up study of 1,271 students who graduated from high school in 1966. Data collected about the students included such items as their father's occupation, type of high school program (college prep or general), family income, high school and college grade point averages, and self-ratings of ability. The survey was conducted in the fall of 1968, two years after the sample had graduated from high school. The characteristics of the students were analyzed to determine what variables were related to

college attendance, type of college entered, and persistence. Because they counted transfer students and those earning A.A. degrees and not continuing as drop outs, Jaffee and Adams reported that the drop-out rate for junior colleges was 64 percent, though they did note that if the students who transferred to a four-year school and were still enrolled at that school were excluded from the drop-out sample the junior college drop rate would be reduced to 53 percent.

However, the 53 percent figure is also inaccurate, because those students who dropped out of the four-year school, enrolled in a junior college, and later either earned their A.A. or completed their program in the junior college were also considered drop-outs. An even more serious flaw in the percentage is the fact that the drop-out figures include students who earned an A.A. and were no longer enrolled in school.

In spite of the distorted nature of their junior college sample Jaffee and Adams conclude that income, social class, high school grades, college grades, and ability are not related to success in the junior college. As a result they concluded that supplementary tutorial and financial aid is not likely to affect attrition rates in the junior college. The fact that many studies have shown that tutorial and financial aid does improve the performance of students and reduce attrition rates (Tarley, 1968; Gold, 1969; Wenrich, Hanigan, & Plug, 1971) was not noted by the authors. The authors also failed to note that their results about the relationships of the students' ability, grades, and social class and attrition are contradicted by numerous other studies.

Rice and Scofield (1969) did a comprehensive analysis of a large number of variables to determine what factors were related to the success or failure of a sample of 2,061 students at Yakima Valley College in Washington state. They defined the "successful" student as one who transferred, or completed 85 quarter units with a G.P.A. of 1.75 or better, or completed 60 quarter units in a terminal program with a G.P.A. of 1.75 or better. Their sample included all the students who were enrolled full time for at least one quarter between 1965 and 1968 and had at least two years to matriculate.

Overall Rice and Scofield found that only 33.9 percent of the sample met one of their criterion for success. These included 9.2 percent who had transferred to either a two- or a four-year school, 23.4 percent who completed 85 units with a 1.75 or better; and 1.3 percent had completed 60 units in a terminal

program with a 1.75 or better. Out of the total sample of 2,061 only 29 percent completed more than 5 quarters, only 18.5 percent completed two years, 55.2 percent completed 50 hours or less, and only 20 percent completed 90 hours. Of those students who completed two years, only 10 percent had a high school grade point average of less than 2.0, 61.8 percent between 2.00 and 2.99, and 25.5 percent had a 3.0 or better. High school grade point was also significantly related to both the number of units completed and college grade point average ($p < .001$ in both cases). Other variables that were significantly related to success were sex, with males more successful, and father's occupation, with higher occupational status related to success.

Characteristics of Students who Withdraw

The studies to be reviewed in this section fall under the category of "autopsy" studies (Knoell, 1966). Basically they fall into two categories (1) follow-up surveys that simply ask students who withdrew what they are now doing and why they withdrew, and (2) studies that compare the characteristics of students who withdrew with those who persisted. Most of the studies in the second group use follow-up questionnaires and interviews, but a few attempt to distinguish between persisters and withdrawees on the basis of pretest data and in some cases to establish a predictive model.

Follow-up Surveys of Withdrawals

The first part of this section of the review will primarily discuss those studies concerned with reasons for withdrawal, and current activities and characteristics of withdrawing students. Most of these studies are based on exit interview data or follow-up studies.

Medsker (1960) summarized a group of studies that were concerned with the reasons for withdrawal. The summary included the results from nearly 10,000 students in 20 colleges between 1949 and 1957. Among reasons given by students for withdrawal were:

	Percent
full-time employment	28
personal or health	16
moved or transferred	11
academic or faculty action	9
military service	8
not interested in or dis-	
satisfied with school	8
financial	6
marriage	3
completion of educational goals	1

Greive (1970) used a follow-up of students who withdrew from Cuyahoga College (Cleveland) in the fall of 1968. The three main reasons given for withdrawal were military (23 percent), full-time work (14 percent), and transfer (19 percent). Sixty percent had a grade point average less than 2.0, and 83 percent of those who gave work or service as the reason for withdrawal had less than a 2.0. Of those who transferred, 91 percent had a 2.0 or better.

Thomas (1969) reported the results of an exit questionnaire given to 119 students who withdrew during the fall quarter of 1968 at one college. During that quarter 328 students (20 percent of those enrolled) withdrew, but only 119 answered the exit questionnaire. This illustrates one of the problems of data of this sort: it could be based on a biased sample. Thomas did not claim that the results are representative of all withdrawing students. In fact, unlike some studies, she reported that many students who left did not answer the questionnaire. The reasons given for withdrawal by the 119 students were:

	Percent
lack of interest	20
illness	18
conflict with work	16
financial	11
not stated	7
transfer to another school	5
moved	5
drafted	3
enlisted	3

One percent or less of the students stated that they withdrew because of marriage, arrest, personal reasons, family illness, dissatisfaction with school, and pregnancy. Thomas also noted that 74 percent of the sample was working 20 or more hours a week.

Machetanz (1968) did a follow-up of the 1964 freshman class five semesters after they entered Los Angeles Valley College. Forty-three percent answered the questionnaire. Of these, almost half (254 out 528) were still actively enrolled. Of those who had withdrawn, the following reasons were given:

	Percent
military	24
graduated	26
personal	19
academic	8
economic	11
other	18

In spite of the fact that only 9 percent gave academic problems as the reason for withdrawal, Machetanz found that out of the total freshman class (N = 1234) 51 percent had been on probation at least one semester and 17 percent had been academically disqualified at least once.

Weigel (1969) studied 100 full-time freshmen male students who failed to re-enroll the fall of the second year. He found that outside of transferring and work, a large number of the withdrawn students cited motivational and academic problems. Some reasons most frequently checked and the percentages were:

	Percent
"a general feeling of not getting anywhere"	58.5
"lack of interest in studies"	44.
"unhappy about school"	41.5
"low grades"	19.5
"did not know how to study"	17.5
"not suited for the program I was in"	17.1

Compared to other studies, many more of the withdrawals in Weigel's sample indicated that interest, motivation, and problems related to academic progress were major factors in causing them to drop.

At Oakland, California's Merritt College (1963), follow-up questionnaires were mailed to those students who were academically eligible to return but did not re-enroll. Approximately 50 percent of the students responded. The major reason given for withdrawal was work. In different semesters from 27 to 40 percent of the students cited work as the main reason for withdrawal, but since the sample included part-time students this is not surprising. They frequently have their hours changed, get new jobs, or have to work overtime and miss classes. The other major reasons given for withdrawal were military service (18 percent for men under 21), excessive absences (9 percent), illness (8 percent), finances (6 percent), family responsibilities (5 percent overall, but 23 percent for adults), and moved (4 percent). Other reasons included marriage, unsatisfactory progress, and change in plans. Academic problems or lack of satisfactory progress was an important reason for withdrawal in the second or third semester (16 percent in the third semester) but dropped to almost zero by the end of the fourth semester. The number of students who withdrew because they transferred to a four-year college increased steadily each semester, so that by the end of the fourth and fifth semester from one-third to one-half of the withdrawals were transfers.

SCAT scores for those who withdrew the first semester were reported and indicated that ability was a factor in the case of those 14 percent who withdrew early. In the second quartile, 18 percent withdrew; in the third, 27 percent withdrew; and in the fourth quartile, 39 percent withdrew. These results confirm the findings of several other studies: that ability, academic problems, and poor grades are major factors underlying withdrawal rates in the first year, but become less important later.

As was noted in the Merritt College study, when part-time students and adults are included in attrition studies, attrition rates are higher; and work, family responsibility, and academic problems become much more important as reasons for withdrawal. Hilleary (1963) found that the evening division students who withdrew were more strongly attached to their work, were more likely to be working full time, and had poor attendance records.

Orange Coast Junior College District (1967) reported on a survey of 811 students who withdrew in the spring of 1967. The survey included all withdrawn students: day and evening, full- and part-time, freshman and advanced. A total of 248 students returned the questionnaire. Of these only 57 percent withdrew through a counselor. Four percent had completed their course of study. The major reasons given for withdrawal were:

	Percent
work	31
personal or other	28
health	11
unable to get desired class	11
lack of time	11
dissatisfied with school	8.5
transfer	10
classes too hard	4

Fifty-two percent stated they felt that withdrawal was in their best interest, and almost all left in the first 10 weeks of the semester. Forty percent said it was necessary for them to work full time. Eighty-two percent stated they planned to return to school.

The results of the Orange Coast survey differ from a study conducted at San Jose City College (1968) which was restricted to day students who were enrolled in the fall of 1967 and did not return in the spring. The Orange Coast survey included all students who withdrew during the semester. The San Jose study also

eliminated all the students who were continuing in the evening school. That left a total of 963 students who did not return. Out of that group almost one-half were academically disqualified and also excluded from the survey. Questionnaires were then mailed the remaining 514 withdrawn students; 83 percent responded. Their reasons for not returning were:

	Percent
transfer	37
earned an A.A.	20
work	16
moved	10
finances	9.5

One of the more comprehensive follow-up studies was the NORCAL project (MacMillan, 1971). The 15 colleges in the project mailed questionnaires to 1,585 students who were first-time, full-time day students in the fall of 1969 and who did not re-enroll the second semester. Responses were received from 750 students (47.3 percent of the sample).

These students were asked to give reasons for withdrawing from college. The major reason for leaving was to take a job (41%). "Motivation" ranked second, with 28.3 percent answering "yes" to the question "I wasn't motivated by my course." Other reasons included: entered the service (14.7%); transferred to another school (15.2%); "got married" (9.3%); health (6.5%); lacked transportation (8.1%); and "got too far behind in any courses" (11.7%). Of particular significance was the large number of students who stated that they withdrew because they either could not get enrolled in the courses they wanted (15.9 percent) or could not get their classes scheduled when they wanted them (10.7 percent). This means over one-fourth of the students withdrew for reasons that could be, to some extent, corrected by the school.

Responses were also cross tabulated by age and race. "Enlisted" was, of course, more frequently mentioned by those under 21. Analysis by race brought out some major differences that are frequently not noted in withdrawal surveys where all students are grouped together. Transportation was a problem for 31.8 percent of the Blacks and 20 percent of the Spanish surname students, in contrast to only 6.5 percent of the Caucasians. Falling behind in course work was reported by 27.5 percent of the Spanish surname students, compared to only 11.7 percent of

the total sample. Both Spanish surname and Blacks also reported that they had less problems with motivation. Only 18.2 percent of Blacks cited motivation as a reason for withdrawal, compared to 31.2 percent for the Caucasians.

Mira Costa College, Oceanside, California, (1966) did a survey of students who withdrew over a three-year period and concluded that the main reason for withdrawal was "the unrealistic image of college life held by entering students". They compared the ACT scores of the withdrawals with full-time freshman who persisted and estimated that 50 percent of the withdrawals had the ability to succeed. As a result of their study they decided to develop a special counseling program that would make the students more aware of their interests and aptitudes and how these related to their goals.

There are many other studies that survey reasons for withdrawal (Bossen, 1968; Hughes, Burnham & Stanley, 1968; McGeever & Burton, 1965; Orange Coast Junior College District, 1969; Sensor, 1967; Synder & Blocker, 1970; Weigel, 1969) but the data presents too confusing a picture. The results differ because different populations were surveyed. The students surveyed may have been freshman or advanced students, they may have been students who withdrew during a semester, or they may have been students who attended one or more semesters and then withdrew. A full-time student who completed his fourth semester and failed to return should not be compared to a part-time evening student who withdrew during his first semester. Also the percent of the students who returned the questionnaires varied greatly, but usually averaged only around one-third. Also the questions asked the student differed, both in terms of the way the questions were worded and in the number of alternatives the student was offered.

The problem with the results of such studies is they are simply not comparable, yet are frequently treated as if they were. For example, one study conducted by Hughes, Burnham, and Stanley (1968) described the "typical" discontinuing student as a "day student; married; has not had prior military service; works from 26 to 40 hours per week; his father and mother have completed a minimum of twelve years of formal education; primary working parent is employed at the professional or managerial level; and is a transfer student working towards an A.B. or higher degree [p.3]". This description of the "typical dropout" was quoted several times by various authors of articles included in this review, but not once was it mentioned that this study was concerned with a popu-

lation consisting of 61 students who had completed between 50 and 59 units and discontinued attendance during or at the end of the 1964-65 year. The college grade point average ranged from 2.26 to 2.63 (for day and night students). The group was obviously an academically capable group and came from families higher than average in terms of educational level and occupational status.

O'Connor (1965) wrote a monograph on follow-up studies that presented examples of types of questionnaires and techniques an institution can use. As he noted, good follow-up studies can provide valuable feedback data for almost every area in the institution and is especially valuable for instruction and counseling. However, the institution that conducts a follow-up study should interpret its own results carefully and be very cautious about comparing its data with studies from other schools. Orange Coast District for example, recently decided to abandon the mail questionnaire technique altogether because they found the results were significantly different from those obtained by personal contacts by phone. They decided that the expense of personally interviewing a small sample is no more expensive than large and repeated mailings, and that the results will be more valid.

In spite of the limitations of research based on follow-up questionnaires, certain general conclusions can be drawn from the findings. One is that work frequently appears as a major reason for withdrawal and this is especially true of part-time students; however, one cannot be sure how many students quit because they had to work, or how many chose work over school. Entering the service is another important factor for males under 21. Illness, personal problems, family responsibilities, finances, moving, and transportation problems seem to be mentioned consistently by anywhere from 5 to 20 percent of the students. More accurate figures about these factors are badly needed, especially since many of the studies indicate that financial, personal, family, and health problems account for a much higher percentage of dropouts in two-year colleges than Summerskill (1962) reported for four-year colleges.

Another problem is the low number of students who cite academic problems as a reason for their withdrawal. In six of the studies reviewed here the number of students citing academic problems as a reason for withdrawal ranged from 6 to 12 percent. Yet, we know many students fail in their first semester or year and that many junior college students do not have the ability or academic

motivation of their peers in four-year colleges (Cross, 1968; Gold, 1970; Trent & Medsker, 1968). This causes one to be suspect of the large numbers of students who state that the main reason they are withdrawing is to work or join the service.

The results also show that motivational problems are frequently important, particularly for freshmen, but not for students who survive into the second year. Other consistent results are the small number of students who withdraw because they are dissatisfied with their classes, instructors, or the school itself. In fact, the dropouts consistently give their schools and instructors very favorable ratings.

Another major cause for "withdrawing" is to transfer to another school. From 5 to 15 percent of students who have only attended one semester transfer (MacMillan, 1971; Thomas, 1969). In studies of all students who withdrew (both freshmen and sophomores), from 18 to 23 percent transfer (Grieve, 1970; McGeever & Burton, 1965; Snyder & Blocker, 1970). In studies that cover a longer time span or are limited to more advanced students the percent transferring is from 37 to 57 percent (Hughes, Burnham, & Stanley, 1968; San Jose City College, 1968).

However, as noted previously, the use of follow-up questionnaires frequently produces a low response rate and in many cases the respondents represent a biased sample. Students who have transferred and are from higher socioeconomic groups are more likely to answer such questionnaires. Orange Coast (1969) found that 22 percent of 344 withdrawals who answered a mail questionnaire were re-enrolled in one of the two junior colleges in their district. However, when they telephoned a sample of those who did not return the mail questionnaire, they found only 9 percent of the 213 students contacted had returned to school.

Sensor (1967) found that out of her sample of freshman students who dropped during their first year, 19 percent were in another school, about one-third were working, one-third were in the service, and 11 percent were homemakers. Only 10 percent gave low grades as a reason for withdrawal, yet nearly 57 percent had less than a 2.0 grade point average. Twenty-eight percent of her sample dropped without completing one semester; 27 percent completed two semesters. About one-fourth stated that school would have helped them more if they had clearer goals or been better students. Only about 10 percent complained about the quality of instruction.

McGeever and Burton (1965) did a survey of students who discontinued attending

and student records compares the withdrawals with a sample of their peers who persisted. The second group of studies generally pretests a group of students, then after a period of time checks to see who has dropped and how the withdrawals differ from the persisters. In some cases posttest data is also obtained or attempts are made to develop predictive models.

Aiken (1968) compared samples of persisters and withdrawals in a Florida junior college. Persisters were defined as students who first enrolled full-time in the fall of 1966 and were in continuous enrollment over five trimesters. Withdrawals were full-time students who entered at the same time and withdrew voluntarily. Questionnaires were mailed to a randomly selected sample of students, sixty percent of whom responded, 44 persisters and 46 withdrawals.

Analysis revealed that there was no significant difference between the two groups in terms of their degree objectives (A.A. vs. B.A.) or their parents' occupational or educational level. There was a significant difference in terms of college grade point average ($p < .01$). The mean G.P.A. of the persisters was 2.45, compared to a mean of 1.92 for the withdrawals. More of the persisters were under 20. Aiken found that 33 percent of the withdrawals were married, compared to only 7 percent of the persisters. There was no difference in terms of the number undecided about future plans. Thirty-five percent of the withdrawals planned to continue their education, as compared to 86 percent for the persisters. Both groups also gave very favorable ratings to the school, their teachers, and their counselors. As was also noted in previous studies, withdrawals seemed more likely to have academic problems and tend to be older.

Matson (1965) compared the records of 144 students who withdrew from a California junior college during 1953-54 to a sample of the total student population. Of the 144 withdrawals, 49 had filled out an evaluation opinionnaire and had been interviewed by a counselor at the time they withdrew. Ninety-five students withdrew without the exit interview. The questionnaire used contained a set of 12 open-ended questions, such as "I think counseling service is..." The responses were rated as "favorable", "unfavorable", or as an expression of "mixed feelings".

Withdrawals were found to differ significantly from persisters on several measures. More withdrawals were non-graduates from high school ($p < .01$). Those students who took a college-prep high school program were more likely to complete

Palomar Junior College (San Marcos, California) during the year 1963-64. They received 310 responses from 1,022 students. Fifty-two percent completed only one or two semesters and about 10 percent completed five or more. Fifty-seven percent were employed full time, but only 18 percent were employed in a field related to their educational program. Forty-four percent stated they planned to return to Palomar.

Synder and Blocker (1970) were primarily concerned with the activities of students who did not graduate within a two- to four-year period and were no longer enrolled at Harrisburg Area Community College in Pennsylvania. Nearly 52 percent of the sample of 1666 students responded. The median number of units completed by the group was 30, with males averaging 33 and females 26. One-third of the sample had transferred to a four-year school and 22 percent were still enrolled in school. Fifty-four eventually earned their A.A. degree. Nearly 50 percent of the sample were employed and 80 percent of these were working in the area served by the college. The students who had majored in occupational programs were almost all employed in the area in which they had majored. This was the case for 76 percent of the secretarial/clerical majors, 63 percent of the engineering and technical majors, 67 percent of police science majors, and 48 percent of the business management majors. Current incomes were also checked. The transfer students averaged \$6166 a year and the occupational majors averaged \$5675. In addition to those who transferred, 10.2 percent withdrew because they had achieved their goal. Out of the sample almost one third were non-transfer majors and a large number had limited educational goals. Eight percent enrolled only to take one or two general education courses, 9.2 percent enrolled to clarify their educational or occupational goals, 6.7 percent wanted to earn a certificate or improve their job skills, and 3.4 percent enrolled to improve their learning skills. The fact that so many had objectives that could be completed in less than two years shows the importance of considering the students' goal in studies of attrition.

Comparisons of Persisters with Withdrawals

The studies reviewed in this section attempt to analyze the differences between persisters and withdrawals to determine the characteristics and problems of the dropout. In terms of methods the studies fall into two main groups. One group selects a sample of withdrawals and through the use of follow-up information

one semester; the withdrawals were less likely to have planned to attend college while in high school ($p < .02$). More withdrawals had educational goals of two years or less ($p < .01$). The younger students were more likely to have completed one semester, and more withdrawals were over 30 years of age ($p < .02$). The persisters and withdrawals also differed in terms of their occupational aspirations ($p < .001$) and this seemed to be due to the large withdrawal rates for students who were undecided or majoring in clerical areas.

No significant differences were found between the groups in terms of sex, marital status, high school attended, fathers' occupation, academic aptitude test scores, college grade point average, or veteran status; but the analysis of the responses to the opinionnaire revealed that the drop-outs lacked a sense of belonging or identification with the college environment.

Bossen (1968) studied the characteristics of a sample of 50 withdrawals and 50 persisters at a California junior college. The withdrawals were randomly selected from a larger sample of day students who withdrew between the fourth week and the end of their first semester. Persisters were students still enrolled, most of whom were in their fourth semester. Bossen was interested in whether the withdrawals had changed their views about why they withdrew (as compared to the reasons they gave at the time they left) and if those withdrawals who returned to school differed from those who did not. The persisters and withdrawals were matched on the basis of their ACT scores because it was noticed by inspection that withdrawals tended to have lower scores. The groups were also matched by age, marital status, fathers' occupation, sex, and race to make sure they were representative of the total persisting and withdrawing groups.

Of the 50 withdrawals, 22 had returned to school. In terms of reasons for withdrawal 16 give different reasons than those originally given at exit, and 25 felt their reasons were basically the same but elaborated on them much more. Only nine said there was no change at all from their originally stated reason. Bossen felt that for the majority of students who withdrew and returned to school the withdrawal period was a "productive moratorium" in which the students re-evaluated their goals, resolved their indecisions, and solved their physical, personal, and social problems.

Of those not in school the majority were either married, working, or in the service. They tended to feel that school "was not for me", that they were not

interested in their classes, were "tired of school", or were only attending to please their parents.

Those withdrawals who returned to school were compared to those withdrawals who did not on several measures. The groups did not differ in terms of age, when they made their decision to go to college, or marital status. Nor did they differ in terms of their evaluation of the teaching and learning environment of the school. However, more of the non-returnees were "undecided" about their majors ($p < .01$), their parents were less likely to have attended college ($p < .02$), and they were less likely to have a clear idea about their vocational goals ($p < .02$).

Differences between the persisters and withdrawals that were significant included their evaluation of faculty, with 96 percent of the persisters giving the faculty "excellent" or "very good" ratings, compared to only 52 percent of the withdrawals ($p < .001$). The same was true of the groups' evaluation of counseling. Sixty-four percent of the persisters but only 30 percent of the withdrawals give counselors a high rating ($p < .001$). The most significant results of the study were (1) finding that withdrawals are more negative in their evaluation of the faculty and counselors and (2) the results of the interviews that found that many students resolve their problems and return to school. As a result of the study Bossen recommended that counselors take a more positive attitude towards vocational courses, and that they be more flexible and allow students to take courses that interest them rather than giving them a full program of required general education and remedial courses. That withdrawals frequently do get such programs and do poorly in them is supported by a study conducted by R.J. Fitch (1968) on the courses failed by first semester freshman. In that study the records of 100 students who earned less than a 2.00 were examined. Nearly one-half of all of the course failed were in non-science, general education courses typically taken by transfer freshman undecided about their majors. The number of failures in courses in occupational courses or courses directly related to a specific major areas such as science, art, or business was very low.

Stocking (1969) did a study of withdrawals who were enrolled in a transfer program and withdrew before they completed the program. He checked the educational background of the students' mothers and concluded that the results supported the findings of other studies which report mothers' educational level as an important factor in predicting college success. Another result worth noting was the finding

about parental support. The study found that 80 percent of the persisters compared to only 57 percent of the withdrawals wanted to go to college and had both parents agreeing. Seventeen percent of the withdrawals stated they entered college against their own wishes but in line with their parents' wishes. None of the persisters reported this situation.

Jaffee and Adams (1971a; 1971b) found only one variable that differentiated withdrawals from persisters in the junior college group, the type of high school program the students took. College prep students persisted better than those with non-college prep programs ($p < .01$). As noted in previous studies, junior college students who transfer to a four-year school usually have taken a college prep program in high school and generally have above average grades. Therefore if the transfer students had been included in the group of persisters the difference would have been even larger. More junior college dropouts came from families with incomes below \$7,500. The difference was not significant but it approached the .05 level. A number of other variables were not found to be significant. These included high school and college grade point averages, the students self-rating of how bright he was compared to his peers in high schools and college, father's education, and the occupation of the head of the household. If they had included the students who transferred in the persistor group their results might have been different.

A few studies have pretested students and checked the differences between persisters and withdrawals after a period of a semester or two. These studies are similar to those conducted by Trent and Medsker (1967), Jaffee and Adams (1971a; 1971b), and Medsker (1960) reviewed previously in this report, but they are primarily concerned with freshmen who drop during or at the end of their first semester and do not usually use follow-up techniques.

Cohen and Brawer (1970) reported the results of a study of 259 freshman at one California college who were given a battery of tests early in their first semester. The testing included (1) a questionnaire about socioeconomic background, age, sex, the number of units carried, and hours spent working; (2) the Adaptive-Flexibility Inventory, a test which measures such traits as the ability to delay gratification and to tolerate ambiguity; (3) the Omnibus Personality Inventory (OPI), and (4) the Henmon-Nelson Test of Mental Ability.

The tests were administered at the beginning of the spring semester. The

students records were checked at the end of that semester and again at the end of the next fall semester to see who had persisted or dropped. Withdrawals were defined as students who either did not complete their first semester, did not enroll for a second semester, or did not transfer. Persisters were defined as students who completed their first semester and either re-enrolled or transferred.

The items from the questionnaire were analyzed by the Chi square test. Significant differences between persisters and withdrawals were:

- (1) Dropouts were more likely to be enrolled for fewer than 12 units ($p < .01$).
- (2) Dropouts tended to have attended more schools prior to the 10th grade ($p < .01$).
- (3) The mothers of dropouts tended to have less education (more of the mothers of the withdrawals did not graduate from high school, $p < .05$).

No differences between persisters and withdrawals were found on a large number of other variables, including age, sex, degree plans, major, transfer plans, high school G.P.A., and parents occupation.

O.P.I. scores of students who dropped early indicated that they are more introverted, more interested in esthetics and abstract thinking, more sensitive, and more likely to have emotional problems. This seems to indicate that the early as compared to the late withdrawals are more likely to have emotional problems. However, the fact that they have a higher interest in academic and esthetic matters is difficult to explain. Late withdrawals, however, appear to be more practical and extroverted.

The fact that the dropouts took fewer units and worked more hours indicates that they were either less committed to school or had more financial problems, or both. Since their mothers had less education it indicates they were less likely to have parental support. The fact they attended more schools suggests a lack of stable family life, and this tends to be supported by the fact that those who withdrew early seemed to have more emotional problems than those who dropped later.

One of the major studies on Drop-outs is the NORCAL project (Macmillan, 1969, 1970, 1971) involving 22 junior colleges in Northern California. Representatives from the schools developed a questionnaire of 112 items about students that had been found to be related to persistence in other studies. The project was de-

signed to continue over a three-year period. In phase one the questionnaire was administered to all full-time entering freshman day students in the 22 colleges. The responses of the students who withdrew during their first semester were compared to the responses of the persisters to determine which items distinguished the groups. Then the items were analyzed by multiple regression analysis to select the most potent predictors, to derive weights for the items, and to develop discriminant scores that would predict which students were most likely to drop. In phase two the predictive validity of the selected items was checked. Phase three involved the evaluation and testing of programs designed to reduce attrition rates.

In phase one, over 22,000 students took the questionnaire. The best predictors were selected and the most effective combination of weighted responses included sex and ability, value placed on college, race, major, and parental support. In the model, high positive scores were related to attrition and negative scores to persistence. The highest score a student could earn would be achieved by a low-ability Black male who is undecided about his major, feels that college is of low importance, and has low parental encouragement for college (score = + 49.8). The best score for persistence would be earned by a mid-ability Oriental female with a transfer goal and high personal and parental concern about college (score value = -33.2). Overall, the model identified 65 percent of the students correctly as either persisters or withdrawals. However, only 50 percent of the actual drops were correctly identified. The model was based on an analysis of 1,436 persisters and 1,436 withdrawals. For phase three it was recommended that students with scores above +10 be classified as high risk students for the experimental programs.

In phase one an analysis of the differences between institutions was also conducted. The range of attrition rates for the 22 colleges varied from 3.9 to 21.24 percent; the mean rate was 7.47 percent. A number of institutional variables were examined to determine if they were related to attrition rates. The variables that showed a significant correlation with attrition included: high proportion of transfer students ($p < .001$); low faculty/student ratio ($p < .05$) and a high proportion of adults who were college graduates in the community ($p < .05$). Two variables that were not significant deserve special mention. One was the wealth of the district in terms of the ratio of the value of property that forms the tax

base to the number of students. The second was the correlation between attrition and the student/counselor ratio which was very low ($\rho = .08$).

Hannah (1969) reported very briefly about the results of a study on dropouts being conducted by 13 small colleges in the east. The complete results and data are not included in the report, only a summary of some of the major findings was presented. The schools were using the Omnibus Personality Inventory to compare withdrawals and persisters. How a withdrawal was defined was not stated in the paper. However, the typical dropout was described as more impulsive, more complex, more independent, and less willing to create good impressions about himself. Considerable differences existed between certain schools, however. Students who left conservative religious schools were more anxious, more religiously liberal, and less altruistic. Hannah reported that 20 percent of the dropouts thought about withdrawing before they enrolled. Data about the self-concept of the leaver revealed no consistent pattern. They did not seem to have less self-confidence or confidence in their abilities than the persisters. They were more uncertain about their future plans and more pessimistic about the future than the persisters. In general, the schools were evaluated favorably by both persisters and withdrawals, but over one-half gave counselors poor ratings, and the withdrawals reported that the people they talked to about dropping were their peers and parents, with college personnel running a poor third.

Kievet (1971) conducted a study of personality and students' views of the college to determine how these variables might be related to attrition. Eight hundred entering freshmen from a vocational institute and a nearby comprehensive community college were given the College Characteristics Index (C.C.I.) and Sterns Activities Index (S.A.I.). Records were checked at the end of two years to see who had dropped. Thirty percent of the students at the community college had dropped, while 48.5 percent of those in the technical institute were no longer enrolled. Persisters and withdrawals were compared on a number of variables (parents' occupation, marital status, parents' education) and no differences were found. Males did have higher drop rates, and this was a significant factor at the technical school. Slightly more of the withdrawals were in the lower placement test levels, but the differences in test scores was not significant.

There was almost no difference between the persisters and the withdrawals on the various scales of either the C.C.I. or the S.A.I. Persisters and with-

drawals did not differ significantly on any of the scales of the C.C.I. and on only one scale of the S.S. At the community college the withdrawals were lower on every scale related to intellectual orientation, but they were not significantly lower on any one scale. The converse was true at the technical school. Across both schools, withdrawals tended to be higher on self-assertion, audacity-timidity, motivation, and constraint than the persisters.

Because of the institutional differences, Kievet concluded that attrition rates depend more on intellectual interests and motivational patterns than on ability or other personal characteristics and that institutions differ in what types of students drop. This "selective retention factor" for different types of institutions was also noted in studies by Hannah (1969); MacMillan (1970); Medsker (1960); and Trent and Medsker (1967). The studies also consistently showed that few junior college students complete their programs in two years, even when they are full-time day students.

Conclusions

In looking over the data on junior college attrition one finds that the long-term performance of the full-time day students rather consistently shows that about 50 percent enroll for a second year and that less than 40 percent complete two years or more. However, not all of these students are academically successful; therefore, the number that transfer to four-year schools or earn A.A. degrees is less than the number who complete four semesters or more. The studies consistently agree that about one-third of the students transfer, but the figures on the number who earn A.A. degrees varies widely. Over a three- or four-year period, the number earning an A.A., as reported by the various studies, ranged from 15 to 35 percent. Why there is such a large variation is difficult to explain, but it may be due to differences between institutions and the composition of their student bodies. One of the more significant findings seems to be that persistence rates have remained relatively constant over the years.

In terms of success, the academic performance of students seems to be the main reason why so many students fail to return for the second year. A large number of students are on probation after a semester or two (from 20 to 50 percent) and many are academically dismissed. Large numbers (up to 50 percent)

complete their educational careers with a low grade point average.

In summarizing the studies that compared drop-out persisters, one is again faced with a confusing array of data. Definitions of withdrawals differ greatly. In many cases a large percent of the drop-outs had continued their education at another school, yet they were counted in the attrition figures. Several of the studies were poorly designed, had a low response rate from their subjects, and used questionable statistical techniques. But within the limitations of the data, some of the more consistent findings indicate that the drop-out is characterized as follows:

1. Ethnic background: The drop-out is more likely to be from a disadvantaged group or an ethnic minority (MacMillan, 1970; Hall, 1968).
2. Ability: Some studies report that he is more likely to have lower academic aptitude test scores (MacMillan, 1970; Weigel, 1969), but others disagree (Cohen & Brawer, 1970; Matson, 1965; Kievet, 1971). He is less likely to be a high school graduate and more likely to have taken a college preparatory program in high school (Matson, 1965; Jaffe & Adams, 1971a, 1971b). Whereas, the majority of the reports indicate, he was likely to have encountered problems with his courses and to have earned a lower grade average (Hall, 1968; Aiken, 1968; Weigel, 1969; Cohen & Brawer, 1970; Bossen, 1968).
3. Educational plans: The drop-out is more frequently undecided about his major or his future educational plans (Aiken, 1968; MacMillan, 1970; Matson, 1965; Bossen, 1968). The data on the differences between withdrawals and persisters in terms of degree objectives is unclear, but that seems to be, in part, due to the fact that in many of the studies the withdrawals had transferred to another school. In fact, one of the more consistent findings reported by the studies is that from 35 to 64 percent of students who drop out re-enroll at a later date or transfer.
4. Socioeconomic characteristics: Most of the studies did not find that the education or occupation of the parents was a factor (Matson, 1965; Aiken, 1968; Stocking, 1969), but two studies did find that parents' educational level was significant (Cohen & Brawer, 1970; Bossen, 1968).
5. Parental encouragement: In every case in which the degree of parental encouragement was studied it was found that weak parental support was an important factor in dropping out of school.
6. Other variables: Withdrawals tended to be older (Aiken, 1968; Matson, 1965), but this is not an important factor for full-time, day freshman students. Sex or marital status do not seem

to be important factors. Part-time students are more likely to drop than full-time, and the drop-out tends to work more hours. Veteran status does not seem to differentiate withdrawals from persisters.

7. Motivational and personal problems: Virtually every study reviewed indicated the withdrawals are less interested in school, are less motivated to earn a degree, and are less likely to feel that college is important. They also tend to have more emotional and social problems. (MacMillan, 1970; Bossen, 1968; Cohen & Brawer, 1970; Weigel, 1969; Matson, 1965).
8. Evaluation of college experiences: Though in general the withdrawals give the colleges and faculty a favorable rating, they are much more critical of counselors (Bossen, 1968; Weigel, 1969; Matson, 1965). This is especially serious because when they enter school and when they leave the studies repeatedly showed they are more likely to be uncertain about their future and more in need of counseling, either vocational, academic, or personal. As Matson (1965) noted, the drop-out tends not to identify with the school and doesn't feel a "sense of belonging".

The studies reviewed in this section show that longitudinal studies over a four- or even a five-year period are necessary because two-year colleges are really three-, four- and five-year colleges for many students. Also, the previous studies show that more pretest data is needed, and that the only accurate way to assess what really happens to students is to conduct carefully designed longitudinal studies of samples of students over a period of time. The attrition rates of different kinds of students also need to be examined more carefully.

Many of the studies reviewed here do not clearly differentiate between these various types of students. All of the above statements are based on studies dealing with day-time students, and most of them are full-time freshmen. Few studies have included part-time evening students, but when they are included attrition and failure rates increase sharply.

Most of the studies are also based on examination of student records and are usually concerned with the normal measures of ability, socioeconomic status, and such characteristics as sex and age. Few studies have ever attempted to evaluate any of the students' attitudes, values, or personality traits. Even more important, none of the studies have focused on the students' own educational goals; thus they give a false picture of attrition, because attrition can be measured only in terms of the students' objectives.

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CHAPTER 6

CAREER EDUCATION

Felice Karman

The Status of Vocational Education in the United States

It is ironic that in the United States, a society greatly dependent upon the skills of trained technologists, institutions offering vocational training and students seeking the same are given only second class priority. There is unanimity in the critics' denunciation of our educational prejudices which sanctify the A.B. degree and denigrate vocational education with the resulting "low enrollment in the technical programs, high enrollment in the respectable 'academic' curriculum, and dropouts and failure by the hundreds of thousands" (Cosand, 1966, pp. 193-194). After a comprehensive study of the junior college Medsker (1960) stated that "...the contention that the junior college devotes much of its energy to the terminal program is substantiated neither by the objective data revealed in the study nor by the observations made in the majority of the institutions visited [pp. 24-25]". He also reported that administrators, faculty, and counselors are of the opinion that efforts to interest students in terminal occupational programs are generally unsuccessful except in highly specialized institutions.

One of the major reasons for the discrepancies between stated goals and actual practices of vocational education institutions is the lack of prestige value attached to vocational education (Medsker, 1960). Even students who appraise their abilities realistically as nonacademic are reluctant to enroll in terminal occupation programs. Apparently the reputation of being a college preparatory student is of more value than the training for an occupational future.

The paucity of adequate vocational offerings in many junior colleges does little to encourage young people to enroll in vocational programs, according to Thornton (1966), and the failure of high schools and junior colleges to inform parents and students of the possibilities of an occupational education compounds the problem. The dilemma increases, according to Medsker (1960), with the inability of employers to agree on what constitutes good preparation for a job. Their uncertainty, and lack of unanimity does little to prepare high school and college staffs for knowledgeable student guidance. In a study by Yeo (1965) a panel of seven educators outlined a needs curriculum for a proposed community college. Of the 28 programs suggested by the panel, only seven were offered by the college planners, representing a 75 percent area of disagreement. Medsker suggests that additional problems are en-

gendered by rapidly increasing mechanization and automation which demand a great deal more training than do simple mechanical skills, and which require costly and intricate equipment too expensive for most educational institutions.

In this argument for the expansion of junior college occupational curricula, Neilan (1963) points out that the hope that all youth complete an academic high school and college curriculum is a futile dream which is neither attainable nor desirable--unattainable because three-fourths of the youth in the junior colleges are of middle level academic ability or less, for whom a four-year academic curriculum is inappropriate; undesirable because the "needs of average students are also the nation's needs in this era of change" (Harris, 1966, p. 61).

Generally, a student of low academic ability from a low socioeconomic background cannot be expected to survive an academically oriented college curriculum (Flanagan & Cooley, 1966). In view of the relatively depressed socioeconomic status and the academic handicaps of many students (Cross, 1970), society's reluctance to elevate the importance of terminal vocational technical programs and to capitalize on the actual interests and abilities of the student with low academic ability serves to obstruct the democratization of higher education in the United States. The community colleges continue to enroll between two-thirds and three-fourths of their entering students in non-vocational transfer programs (Medsker, 1960). These findings are supplemented by those of the College Entrance Examination Board (1968) which reveal that 43 percent of the students in technical programs and 21 percent in vocational programs have transfer plans upon entering college. Unfortunately, but not surprisingly, only a minority of students actually transfer to a four-year institution (33 percent of the 17,627 in 63 two-year colleges in Medsker's study).

The failure of our educational system to provide for the "middle level" youth represents a waste of financial resources and a critical waste of talent. Effective guidance will require of educators a keener awareness of the occupational demands of society as well as the needs of the nonacademic student whose goals are frequently unsuitable, conflicting, and unformulated. According to Matson (1966) and Harris (1966) the burden of meeting this challenge falls largely upon the community college which is facing what may be the most critical period in its short history. With expanding demands for educational opportunity in all areas of occupational activity, the pressure on the community colleges to provide appropriate education for a diverse

student population will steadily mount.

Characteristics of Vocational/Technical Students

Before traditional techniques are set aside, and new ones are developed, a much better understanding of the characteristics of the vocational/technical student in the community college is needed. Although the paucity of research thus far is a hindrance to the development of new approaches, a few studies are beginning to shed light on the nature of the occupationally-oriented students. The following research studies represent a compilation of the more salient features of this group.

Socioeconomic Status

With respect to home background, the College Board's Comparative Guidance and Placement Program shows that few vocational (15 percent) and technical (20 percent) students have fathers with any college experience. Compared to one-fifth of the four-year college freshman and one-third of the college parallel students in junior college, over half of the vocational students have fathers who are skilled, semi-skilled or unskilled.

McCallum (1967) found that the most common occupational categories for parents of the vocational education students were "skilled" and "low white collar" jobs. About 12 percent of the fathers were in professional and semi-professional occupations. Over 60 percent of the parents had not attended college. Fenske's study (1969) revealed an indistinct profile of high school seniors with vocational/technical plans. On scholastic measures, these students ranked in the highest 30 percent as often as they did in the lowest 30 percent. Nor was the level of parents' education and occupation of identifiable characteristics. However, the combination of socioeconomic factors and scholastic rank did yield identifiable characteristics of the future vocational/technical student. Among high school seniors, only 10 percent of those from high socioeconomic backgrounds, compared with 27 percent from low socioeconomic backgrounds, had vocational/technical plans. About 42 percent of the students with low scholastic ranking from high socioeconomic background reported vocational/technical plans; and those with average scholastic achievement chose vocational/technical education independent of parental background factors.

Academic Ability and Achievement

The academic range of ability in the junior college is similar to that of

high school seniors, except for the almost total absence of very low and very high ability students (Flanagan & Cooley, 1966). While men in occupational programs score significantly lower on tests of academic ability than men in college parallel programs, no significant differences between the two groups are found for women. Women in health professions scored higher on the CGP (Comparative Guidance and Placement) than women in liberal arts curricula. Whereas women who enter the occupational fields are largely from the middle ranges of ability, men in these fields tend to be from the low ability levels (Cross, 1970; Hakanson, 1967; Hecker & Taylor, 1967; McCallum, 1967). In McCallum's study (1967) of 327 graduated male students, those who had initially chosen vocational programs in junior college ('initials') were compared with those who made a deferred choice of a vocational program after having been enrolled in a transfer program ('deferreds'). On the SCAT, the "deferred" students were significantly higher than the "initial" students. (10 percentile points on the verbal, 13 percentile points on the quantitative, and 12 percentile points on the total scale). The "deferred" students placed above the mean for four-year college freshmen on the total score, and their ability level was as high as that shown for transfer students. Both groups scored higher on the quantitative than on the verbal scale (10 percentile points in the "initial" group, and 13 percentile points in the "deferred" group). At graduation, the average age of the "initial" group was 23.6 years compared to 25.3 years of the "deferred" group. (This finding might be explained by the additional time spent by the "deferred" group before settling on a vocational education major. The older age of both groups can possibly be accounted for by the fact that most of these male students were employed while attending college, and could not necessarily be expected to complete a two-year program in that amount of time).

GPA's in college were higher for the "initial" group than for the "deferred" group. (This may be due to poor grades in the "deferred's" previous academic courses.) Both groups had higher grades in college than in high school, the "deferred" group exceeding the "initial" group in high school GPA. One-fourth of the men in both groups were married at the time of graduation, and four-fifths were working at least part time.

Choice of Major Field and Occupation

Two-thirds of the "initial" group compared to two-fifths of the "deferred" group in McCallum's study completed majors in junior college that were

related to their majors in high school. The most commonly completed two-year major was engineering, which claimed two-fifth of the "deferred" students and one-fifth of the "initial" students. Mechanics and two-year art courses were selected by 17 percent of the "initial" and only 2 percent of the "deferred" students. About 88 percent of both groups indicated satisfaction with their chosen majors, and 67 percent definitely would re-attend a junior college. One-third of the "initial" group and less than one-fifth of the "deferred" group credited their high school counselors and teachers with having had any influence on their decisions about majors. Both believed that their parents were more influential in this respect than were school personnel.

The choice of an occupational career was, for many occupational students determined between the ages of 14 and 18, if not sooner, and many had taken vocational/technical courses in high school (Cross, 1970). Steward (1966) found that about two-fifths of these students in 20 California community colleges felt that they would have little chance of success in state colleges, and about three-fourths felt that they would not succeed in a university. Most regretted that they had not studied harder in high school. However, three-fourths of them were optimistic about their futures in the occupation of their choice; and, according to a College Entrance Examination Board study (1968), their ratings on interest scales concur generally with their chosen majors. This was particularly true of students in two-year science and engineering courses, and of those in health-related fields, business programs, and the liberal arts.

In their report on vocational/technical students, Gartland and Carmody (1970) observed that those in community colleges transfer from one program to another more than those in vocational/technical schools. They also reported that only 59.1 percent in community colleges eventually completed some program as compared to at least 70.3 percent in vocational/technical schools. Attrition studies are sometimes misleading, however. Schools usually have no means of determining whether a student who has not re-registered is a drop-out, a transfer to another institution, or has merely interrupted his education for a period of time. In this vein, findings from the above study may be considered questionable, as the data came from records of the institutions involved, and not from the students themselves.

Hakanson (1967) found that, of 319 students in six California community colleges who spent some time in occupational programs, most had enrolled

directly after high school rather than after an unsuccessful attempt at a transfer program; and most, especially women, had taken occupational programs in high school. The findings that enrollments in occupational courses are not generally the result of students' failures in transfer programs is supported by both Venn (1964) and Fitch (1969).

Values and Interests

In terms of values systems, the vocationally-oriented student shows a tendency to pursue the more extrinsic, concrete goals of security, respectability, and achievement with less regard for intellectual or abstract thinking (Cohen & Brawer, 1969; Medsker & Trent, 1965; Stewart, 1966). They tend to see education mainly as a means to job preparation and show little interest in counseling and guidance except for help in finding employment; thus they seek the counseling services for assistance with educational and vocational plans less than do transfer students (College Entrance Examination Board, 1968).

Among male vocational education graduates who watch television in McCallum's study (1967) the favorite type of program was the adventure show. About 25 percent of the group preferred general interest magazines. Sixteen percent preferred news, business, masculine appeal, and mechanical and trade magazines. Eight percent selected science journals and magazines such as Harper's, Fortune, and art publications. The majority of men preferred sports for their free time activity.

In a study of comparative interest patterns among students, Nogle (1965) found that transfer men were higher in personal-social interests and lower in mechanical interests than terminal men on the Occupational Interest Inventory. They were also significantly higher in verbal interests and lower in manipulative and computational skills. Transfer women were significantly higher in personal-social interests, and terminal women were higher in business interests.

In his investigation of the characteristics of occupationally-oriented students, Stewart (1966) used the Interest Assessment Scale (IAS), some of the Omnibus Personality Inventory (OPI) scales, and a background questionnaire to compare students from four occupational curricula in a San Francisco Bay area community college with students from a community college emphasizing transfer programs. Differences in mean scores on OPI scales were too negligible to be helpful in a counseling program, but the IAS scales did differentiate significantly among curricula groups. Male aeronautic students, for example,

tended to prefer daring, adventurous activities and to possess aesthetic interests; they scored low on activities related to nurturance and written expression. Students in electrical courses scored lower on "Adventure" and "Aesthetics" and higher on "Abstract Ideas." The IAS also differentiated between male community college transfer and occupational students. For instances, male occupational students showed higher scores on the "Concrete Means" and "Aesthetics" scale; lower scores on "Influencing Others," "Nurturance," and "Written Expression." Women were similar to the males except for the "Concrete Means" and "Aesthetic" scores which differentiated less between the two groups. The male electronics and the women fashion groups were most clearly differentiated from other male and female groups.

Predictive Measures for Vocational Students

A study of the relationship between ACT scores, high school GPA's, and academic success of terminal-occupational students in six community colleges throughout the United States (Hoyt, 1966) revealed that the academic potential of the occupational students was well below that of the four-year college students, but only slightly below the general community college student level. Occupational students were weaker in English and social studies than they were in math and science. Their college GPA's were slightly higher (2.14) than those of all college students (2.09) and all junior college students (2.00). Hoyt recognizes that differential grading practices of various institutions might account for the higher G.P.A.'s of occupational students. (Other explanations might also be considered, however. Occupational students usually major in areas that interest them, and, for this reason, are apt to be more highly motivated than students whose goals are less well clarified and less immediate. Another possible explanation is that it is easier to get good grades in occupational courses than in academic courses.)

Finally, the study indicated that ACT scores and high school and GPA's were almost equally predictive of academic success of the occupational student. Although the predictive validity of the two was less for these students than for academic students, Hoyt believes that, combined, they are useful. His conclusions are supported by Munday (1969) who reported that currently used tests (ACT scores, high school GPA's, and first year college GPA's) are as valid predictors of grades for terminal students as they are for transfer students.

Margaret Crawford (1966) argued against the reliability of standard I.Q.

and achievement tests from secondary schools as predictors of success in vocational classes, and she credits them with very limited value in screening vocational trainees into various curricula. Her research at Los Angeles Trade-Technical College pointed to the superiority of measurements of individual traits combined with specifically-designed aptitude test batteries weighted to predict success in specific curricula with specific institutions. In other words, her approach to psychometrics utilizes the trait and factor theory. At Los Angeles Trade-Technical College, the selection process for students consists of a combination of the above type measurements and an individual interview with the applicant, an instructor in his chosen major, and a counselor. From the interview such factors as age, health, work experience, and previous training are considered before final decisions are made. Generally, an applicant is accepted for training in a particular field if his scores reach at least the 33rd percentile, based on norms developed in an experimental group. If the applicant fails to reach this level, he is counseled and encouraged to attempt other programs more consistent with his abilities as indicated by his test scores.

Lunneborg and Lunneborg (1969) were concerned with the similar problem of developing appropriate predictor tests for vocational education students. They gathered high school transcripts from six community colleges with large, full-time vocational enrollments. The sample group consisted of 2,890 men and women students who had completed one of seven vocational courses and the Washington Pre-College (WPC) battery. The vocational areas studied were agriculture, auto mechanics, data processing, engineering technology, electronics, secretarial studies, and welding. The battery of traditional predictors were age; high school GPA's in English, mathematics, natural science, social studies, and electives; and 10 WPC test scores on vocabulary, English usage, spelling, reading speed, reading comprehension, quantitative skills, applied mathematics, mathematics achievement, spatial ability, and mechanical reasoning. As others, the Lunneborgs found that vocational students in community colleges are below average on standard predictors. High school grades ranged from the 22nd to the 40th percentile compared with state norms for high school seniors. Male students in auto mechanics and welding programs achieved the lowest high school grades of any of the vocational groups. With the exception of mechanical reasoning, performance of the vocational students was poorer than that of the other students. Although they anticipated that the traditional test battery would be accu-

rate in predicting success in courses related to English, mathematics, science, and social science, the Lunneborgs originally believed it would be necessary to develop further, more closely related tests for the prediction of aptitudes in vocational courses such as auto mechanics and electronics. However, the results were surprising. They found that the predictors with the highest degree of correlation with the seven vocational curricula were the high school GPA's. (These findings substantiate those of Hoyt.)

The battery of traditional tests proved to be as predictive of vocational courses as it was for academic courses, with agriculture and secretarial being the most predictable programs on the basis of high school achievement. Among the WPC tests, English and quantitative skills correlated most highly with success in vocational courses rather than mechanical reasoning and spatial ability, as might be expected. One important consideration raised by the Lunneborgs was the possibility that the close relationship between the predictors and the vocational education courses may reflect an emphasis in vocational classes on reading ability, verbal expression, spelling, and so forth. If this is true, it may be that the schools included in the sample are defeating the purpose of their vocational education programs.

Conclusion and Recommendations for Future Research

After surveying the literature, one retains an underfined image of the vocational student in the junior college. The research is scanty and, in the main, of a descriptive nature. Controlled experimental studies are lacking. Aside from some knowledge of their academic and socioeconomic status, we know very little about this segment of the higher education population. In fact, it seems possible that the lack of information about this group is, of itself, an outstanding feature--a concomitant of the relative neglect from administrators, faculty, and counselors they experience in many institutions. Gleazer (1968) states that "there is no question that one of the major problems confronting occupational education is its comparative lack of prestige." He feels that parents perceive the transfer student as "good" and the terminal student as "bad". The National Advisory Council on Vocational Education (1969), in a report to the Office of Health, Education, and Welfare stated that:

At the heart of our problem is a national attitude that says that vocational education is designed for somebody else's children. . . .

The attitude infects the Federal Government, which invests \$14 in the nation's universities for every \$1 it invests in the nation's vocational-education programs. It infects State governments, which invest far more in universities and colleges than they do for support of skill training for those whose initial preparation for the world of work precedes high-school graduation. It infects school districts, which concentrate on college-preparatory and general programs in reckless disregard of the fact that for 60 percent of our young people, high school is still the only transition to the world of work. It infects students, who make inappropriate choices because they are victims of the national yearning for educational prestige....

We recommend that the Federal Government immediately exercise its leadership and allocate more of its fund to cure our country of our national sin of intellectual snobbery. [pp. 45-46]

Fitch (1969), however, saw allocation of more federal funds as only a small part of the solution. He pointed to a report from the Bureau of California Community Colleges (1969) which indicates that only 6.2 percent of the California community college students had selected a major in the "blue collar" industrial/mechanical areas, in spite of the fact that most California community colleges offer a large number of vocational/technical programs, including terminal business and health occupations. Gleazer (1966) recommended a system of vocational education where representatives from a variety of occupational fields spend time in residence at the educational institutions, similar to the arrangement under National Science Foundation funds for visiting scientists.

If new approaches to vocational education are to emerge, more information must be forthcoming. The follow questions are suggestive of the research needed to fill some of the knowledge gaps in the field of vocational education:

Do vocational students show lower attrition rates, higher achievement records, and greater satisfaction with their education in a "comprehensive" college environment or in an environment geared chiefly to vocational education?

What are some of the major psychological, interest, and ability differences among students in different majors within the occupational education field? (e.g., welding or cosmetology versus data processing or two-year engineering)

To what extent are low ability transfer students aware of the alternatives that are available to them?

How can predictive tests be utilized more effectively as a counseling device?

What kind of influences are needed to overcome students reluctance in selecting two-year instead of transfer programs?

Are occupational students actually entering job fields for which they were trained? (Need for follow-up studies)

How does the self-concept of vocational students related to their initial choice of a higher education major?

What changes would occur with improved, intensified counseling services? (Chandler, 1967, described a cooperative effort with high school and college counselors and college faculty to reduce attrition rates of vocational education students in San Bernardino. However, this report is not a research study, and results are not examined).

The above questions only skim the surface of the data needed on the vocational education students of the United States. If the federal government does turn its attention to this group, it seems mandatory that a large part of its initial expenditures be devoted to research in this area. Only then will the educational institutions gain insight into improved ways of dealing with vocational education students. Thus far, the responsibility for finding new directions falls upon the junior colleges. According to Medsker (1960):

In the final analysis it would seem that if training for midlevel occupations is to be even more important in the future than it has been in the past, the two-year college, and particularly the community college, should continue to be a logical agency to do the training. If it does not meet this responsibility, the alternative may be another type of institution which will meet it. This would seem unnecessary and unfortunate.
[p. 117]

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CHAPTER 7

PREPARING THE LOW ACHIEVER TO ENTER THE CURRICULUM

Roberta Malmgren

Introduction

The greatest challenge to the open-door philosophy of the junior college is the provision of programs for marginal students. All these students, whose characteristics are surveyed in Chapter 3, are considered by junior colleges to have deficiencies which, unless rectified, will inhibit their ability to succeed in regular college classes. John Roueche (1968) has asserted, "Remedial education is fast becoming the largest instructional endeavor of the two-year college [p. 51]." Efforts, however, to remedy academic shortcomings have often been uninspired, inadequate, and ineffectual. This chapter of the literature review discusses some of the programs developed for marginal students, with particular reference to results obtained.

Regarding attempts to help such students, the nature and content of remedial programs vary widely. Generally there are three major types of programs: 1) individual remedial classes, especially in English, which a student takes concurrently with regular college classes; (2) a block program, a "total environmental press" (Johnson, 1970) where most or all courses have been developed for the low-achiever; or (3) a skills service program, which provides a learning center, with tutoring assistance and auto-tutorial materials.

These programs may be voluntary in nature; but usually students are assigned to them on the basis of standardized test scores, often in combination with high school grade point average or rank. Roueche (1968) found that 95 percent of the junior colleges used such tests to identify remedial students; the order of frequency used is (1) the School and College Ability Test (SCAT); (2) the American Council on Education Examination (ACE); and (3) the American College Testing Program Examination (ACT). The cut-off percentile is usually somewhere in the lowest quartile. The cut-off point differs from institution to institution since one junior college's low-achiever may be another's above-average student. Junior colleges assume that a student scoring below a certain percentile will have trouble maintaining a "C" average in regular college-credit courses. The ostensible purpose of remedial courses, then, is to prepare this student to enter the college curriculum.

Although a number of small studies have been conducted on remedial programs in junior colleges, there are only a few major works devoted to the subject. Among these are William Moore's Against the Odds (1970), a survey of the

literature on high-risk junior college students combined with the author's experience with these students, and a study by Berg and Axtell of "Programs for Disadvantaged Students in the California Community Colleges" (1968). A more data-based review is found in Salvage, Redirection, or Custody: Remedial Education in the Community Junior College, by John Roueche (1968). Two of the most carefully conducted pieces of original research are Richard Bossone's "Remedial English in California Public Junior Colleges: An Analysis and Evaluation of Current Practices" (1966), and a dissertation by Ernest Berg (1965) entitled "Selected Factors Bearing on the Persistence and Academic Performance of Low Ability Students in Four California Junior Colleges", the latter, as the title indicates, focusing primarily on students. In addition, the American Association of Junior Colleges has collected Junior College Journal articles on disadvantaged students and published these in Community College Programs for People Who Need People (1970). Although this last book contains many descriptions of remedial and developmental programs, little evaluative data appears in the articles. These six works, supplemented by individual studies available through the ERIC Clearinghouse files, form the major basis for the following discussion.

The above authors all agree on one point: remedial programs are not remedying deficiencies. Bossone (1966) noted that in one typical California junior college, 80 percent of all the freshmen were enrolled in remedial English. Of these only 20 percent were able to achieve a level of competence permitting them to enroll in English 1A. At El Camino College (Torrance, California), where 60 percent of the student body take remedial courses, 40 percent drop out, 30 percent receive grades of "F" and 21 percent achieve only "D's" (Elmgren, Kersteins, & McCoard, 1967). Boggs (1968) reported that 75 percent of remedial students drop out of junior colleges their first year. Fitch (1968), in a study of courses failed at Cerritos College (Norwalk, California), found that 24 percent of the students studied failed a remedial English class. Bossone's survey (1966) disclosed that 85.7 percent of remedial teachers in the study believed that the remedial courses they taught were not very or only moderately effective (in spite of the fact that 71.4 percent had indicated that they felt confident of their competence to teach the courses).

Characteristics of Effective Programs

There is one overriding question regarding institutional attempts at remediation. What contributes to the success or failure of remedial programs? Some of the more important factors are remedial teachers, the type of program, various techniques, and the issue of heterogeneous versus homogeneous grouping.

Some investigators have tried to isolate factors which help or hinder such programs. MacMillan (1970) listed eight criteria as characterizing successful programs for low-achievers. He evaluated remedial programs in California and found that the five which had the highest evaluation also had the greatest number of the following activities: (1) recruitment, (2) diagnostic testing, (3) special block programs, (4) tutorial assistance, (5) financial aid, (6) transportation money, (7) counseling, and (8) special instructional materials. In addition to such goals as retaining 75 percent of the recruited students for the first year or providing \$90 each semester for transportation, behavioral objectives were established for each of these activities.

Bossone (1966) listed nine factors which hamper the effectiveness of remedial classes: (1) placement procedures, (2) lack of communication between the staff involved in testing and counseling students and teachers, (3) oversized classes, (4) untrained or uninterested teachers, (5) inadequate course outlines, (6) vague objectives, (7) inadequate materials, (8) methodological problems, and (9) remedial teachers' lack of knowledge about their students.

The teacher is, of course, pivotal in the success or failure of remedial classes but there is a lack of consensus regarding the characteristics of remedial teachers in the junior college. Roueche (1968), Bossone (1966), and Moore (1970), all agree that remedial teachers are frequently inexperienced. In Bossone's survey, for example, 48.1 percent had taught for two years or less; 55.3 percent had only one or two years of experience teaching remedial English in the junior college; and many of them were not interested in teaching remedial courses. Bossone also found that virtually none of the remedial teachers whom he surveyed had received information on the placement examinations of their students and that only one teacher felt that such data

might have been useful. Bossone (1966) sardonically suggested, "Perhaps teachers have been operating for so long on intuition without such information they feel it is not important to receive specific information about the students performance--a most curious situation indeed in an educational era dominated by the philosophy that a teacher must know his students [p. 14] "

Ferrin (1971), on the other hand, discovered that typical remedial faculty member differs from this portrait. At 92 percent of the junior colleges which he studied, the remedial teacher had about the same (or more) experience as the regular faculty member. Over two-thirds of these teachers had volunteered for their positions. Although these statistics are cheering, they apply only to what Ferrin typed as developmental (block) programs, which were in existence for less than two years and deal with only 20 percent of a total remedial junior college population of 40,000.

As MacMillan (1970) indicated in his lists of criteria for successful remedial programs, block remedial programs appear to be especially effective. One such course of study is the independent general studies program at Macomb County (Michigan) Community College (Chalghian, 1970). This year-long program has small classes, a variety of activities, and much student involvement. In one study of its impact, first-year students were matched with a control group which had higher pre-college test scores. At the end of the year, two-thirds of the experimental students had earned 25-33 credits while only one-quarter of the control group had done so. In addition, three times as many of these students graduated from Macomb as students from the control group.

A number of studies, however, indicated that even such total efforts as go into block programs do not necessarily produce a significant difference in a marginal student's progress. A two-year longitudinal study on students initially enrolled in a basic studies program at Fresno City College found no evidence that the program had helped them (Gaither, 1968). These students, who had scored below the 15th percentile on a standardized test, were matched with students who had achieved similar scores but who had enrolled in three or more academic courses. Although the experimental group obtained a mean grade point average of 1.92 the first semester, compared to 1.72 for the controls, this mean dropped to a final 1.72 in the

fourth semester while the mean grade point average of the control group rose to a final 1.97. Even the mean grade point average that the experimental group achieved their first semester might be explained by differential grading standards in the basic studies program. In addition, the drop-out rate was approximately the same for both groups over the two-year period.

Heinkel (1969) conducted a study of the General Studies Program at San Diego City College, using first-time, entering students from Fall 1967, Spring 1968, and Fall 1968, who had received scores of 10 or less on the ACT English Section. Students from four groups were selected. The first group (N = 90) enrolled in all four General Studies courses (Study Habits, Reading, Basic English, and Career Planning). The second group (N = 32) consisted of students who enrolled in all the above courses, except Career Planning. Group No. 3 (N = 38) registered for Reading only, and the fourth group (N = 90) did not take any classes offered by the General Studies Program. These groups were compared in terms of persistence, course-attrition rate, and grade point average over a period of three semesters. Heinkel concluded that the General Studies Program did not cause students to persist, drop fewer classes, or earn better grades.

Although block programs appear to be more effective than single remedial courses, some single courses have produced impressive results. Golden West College offers remedial English composition to large groups (200-365) and the course appears to be successful (Freligh, 1969). Two consecutive nine-week classes, English A and B, are offered in one semester. English A meets daily and is taught by the lecture method but is staffed by teachers who have volunteered to teach the course. The objective of the course is to teach students to recognize spelling and grammatical errors, an ability which, it is believed, will enable them to succeed in the regular composition course, English 1A. Students earning "A's" and "B's" need not take English B and may enroll in English 1A the next term. Students receiving a "C" grade or lower in English A take English B the second nine weeks of the term. English B is a small-group writing laboratory. Students achieving a "C" or better in English B are then qualified to enroll in English 1A.

The results of this program have been positive. Sixty percent of the students finishing English A receive "C's" or better. The withdrawal rate for this class is 10-13 percent, the lowest for any class at Golden West. Furthermore, once in English 1A, 11-14 percent more English A/B students receive "C's" or better than students who, on the basis of placement test scores, were initially qualified to take English 1A.

One of the most recent developments in individualizing remedial instruction in junior colleges is the learning center. Learning centers are resource centers which offer audio-tutorial and programmed materials, as well as tutorial assistance. Though they frequently provide academic aid in various subjects, their most usual orientation is to reading remediation. (This topic is also discussed in Chapter 8.)

At the College of San Mateo, a Learning Center was started with a view to preventing attrition. Based on questionnaires from the NORCAL Project (which indicated the attrition liability of the student), the investigators compared 49 students who were rated as having a high attrition liability but who had enrolled in the Learning Center to 49 students with similar liabilities who had not enrolled in the Learning Center (Weinrich, Hanigan, & Pflug, 1971).

The program was voluntary and flexible in that it allowed students to opt for discussion groups, tutorial aid in basic skills, programmed instruction, or work in a reading laboratory. Tutoring, however, formed the basis of the program; ten students were used as tutors.

At the end of the first semester, three of the experimental group ($N = 49$) and seven of the control group ($N = 49$) had dropped out. In addition, one-half of the experimental group completed a full load compared to 37 percent of the control group. Forty-six experimental students registered for the spring semester, but only 35 control students did so. With respect to grades, 60 percent of the experimental group achieved a G.P.A. of 2.00 or better while only a little more than 50 percent of the control did so. The authors of the report on San Mateo's Learning Center concluded that the Center's effectiveness was mainly a result of the combination of academic aid and counseling, which offered students some degree of personal emotional support.

Another aspect of remedial programs needing further research is the effect of heterogeneous versus homogeneous grouping. Indirectly, this question is taken up whenever a control group of matched students in regular courses is compared with a remedial population. For example, a study conducted at Miami-Dade Junior College used as a control group 73 students who were eligible for the remedial program but who were placed in regular English classes (Losak, 1968). These students were compared to 461 remedial students over a period of two terms. As in Freligh's study at Golden West College, the mean grade point average of the experimental group was higher than that of the control group for the fall term only. In the winter term, when both groups were enrolled in regular college courses, there was no statistical difference in the mean grade points achieved by the two groups. Similarly, the two groups were given two posttests at the end of the fall term. Although the experimental group scored much higher on the Nelson-Denny, the investigator felt that this was due partly to the fact that many of the teachers consciously taught to this test. Because of this, he administered another test, the Sequential Test of Educational Progress, to the experimental and control groups. On this test, no significant differences appeared between the two groups. Moreover, in a comparison of attrition rates, it was found that no differences between the groups existed for fall term; and during the winter term, the withdrawal rate of the remedial students was much higher than that of the controls.

In short, homogeneity, the grouping together of students with similar low scores on achievement tests, did not result in significant benefits for these students either in grades or persistence rates. Once in regular classes, low-scoring students without the benefit of remediation had as good a chance of achieving a "C" or better as did those students who had taken remedial classes.

While this study and others using similar matched control groups are primarily concerned with evaluating the effectiveness of remedial programs rather than judging the relative merits of homogeneous or heterogeneous groupings, their results tend to support the idea that heterogeneous grouping does not have an adverse effect on some low-achievers. What is

needed is a more systematic study of the type of marginal student who is most likely to benefit from placement in regular college classes. It is possible that for many high-risk males, with a background of stigmatic grouping, the advantages of special techniques and materials offered in remedial classes may be offset by the loss of self-esteem accompanying such an identification.

Some authors take a much stronger stand on the issue of heterogeneous grouping. Fader (1971) argued that homogeneous-ability tracking has a profoundly negative effect on remedial students and recommends heterogeneous classes where better students help weaker ones. Fader sketched a plan whereby competent second-year or second-semester students are hired as teaching assistants. The teacher and his assistant meet once a week with the entire class (averaging 32 students). Once a week groups of four students meet alternately with the teacher or the teaching assistant. The four students are in pairs, one a good student and one an academically weaker classmate.

Fader believes that eliminating ability groups, combined with sincere concern for the low-achiever, is the only way to solve the problem of ineffectual remedial English courses. Other writers, for example Berg (1965), agree that remedial courses should be reduced and that traditional remedial students should be placed in regular classes but, conforming to Fader's suggestion, with supplemental special counseling and/or tutorial assistance.

Evaluating Remedial Program

One of the causes of the continuing ineffectiveness of such courses is the lack of research in evaluating them. For the most part, developing a remedial course seems to be done primarily on an intuitive basis. The ERIC files list well over 100 documents pertaining to remedial programs; the majority of these are merely descriptive.

There are three main defects in remedial program evaluations. The most salient is the lack of the use of a valid control group. In some cases, evaluations are based entirely on subjective judgments, either by staff or students. In others, criteria such as persistence, grade point average, or pre-test/posttest differences are used; but rarely is a control group compared to the experimental students. When control groups are used, they are most

often composed of the general college population rather than of a matched group of students similar to the experimental group in all respects except for enrollment in the remedial program being evaluated. A valid control group would be one of students matching the experimental remedial groups with respect to scores obtained on standardized examinations, high-school grade point averages, sex, age, and ethnic group (when appropriate).

Another deficiency in remedial-course evaluation is the length of the study. Many studies limit themselves to one academic term, basing comparisons of grades and persistence on data obtained while students were enrolled primarily or exclusively in remedial courses where content level and grading practices may differ widely from those of regular college level courses. For example, one of the problems with Heinkel's study (1969), cited earlier, is that his four groups were composed of students who entered college in different semesters. From each of three semesters--Fall 1967, Spring 1968, and Fall 1968--entering students were added to the original "N." This means, then, that although grade point averages were always compared according to the number of terms completed, first semester grades for some students would be calculated for Fall 1967, for others, Spring 1968, and for a third group, Fall 1968. A number of variables may have intervened, including differences in the type of student who waits a semester before enrolling or the possibility of variation in teachers' grading practices in Spring as opposed to Fall semester. In short, the specific period was not held constant; yet students enrolling in various semesters were grouped together as a single unit of comparison.

A third problem with these evaluations is that, even when a valid control group is used and when the study is longitudinal, the individual components of a successful program are not specified. This information is essential for the development of effective remedial programs.

One fruitful approach to the problem of evaluating remedial courses has been developed by Boggs in A Developmental Research Plan for Junior College Remedial Education (1968). This design is discussed in Chapter 3.

Unquestionably, the key to helping the low-achieving student is to be found in the characteristics of that student (see Chapter 3). Furthermore, educators concerned with remediation must, as Boggs has done, look to other

areas, such as motivation and learning theories, for answers to many of the problems presented by the ever-increasing number of remedial students seeking entrance into junior colleges.

In addition to these three primary research problems, there is a related methodological issue involved in descriptions and evaluations of remedial programs. The labels used to designate these programs, among them "developmental," "basic studies," "basic skills," and "compensatory," are as varied as the many levels of remedial instruction. In one junior college, "developmental" may refer to a course for students so lacking in reading ability as to be nearly illiterate; while in another institution the same term may be affixed to a class, voluntary in enrollment, for students whose academic deficiencies are but slight. The crucial issue here is not whether there should be uniformity of terminology but instead that there is a need for researchers to indicate in standard terms of reference what the general ability level is of any given group of students. It would be most useful if writers converted ability-levels of the students under discussion into terms of national norms for college freshmen. Some research utilizes mean scores established at one institution as a point of reference; others use national norms of 12th graders. Often no scores are given.

An example of the problem presented in comparing data is offered by Ferrin's survey (1971) of developmental programs in Midwestern community colleges. Ferrin's study disclosed that, based on the questionable evidence of subjective estimates of college staff, 47 percent of the developmental students continued on to bachelor's degree or vocational studies programs; 12 percent left the program to take a job; and 14 percent were still enrolled in the programs. According to respondents, only 25 percent quit the program from lack of interest, progress, or money. Ferrin warns that these percentages, based on subjective estimates of college staff members, may not be accurate. But even if they were, it would be difficult to calculate the relative effectiveness of the programs; with the exception of a few individual instances, nowhere does Ferrin define, in terms of standardized test scores, the ability level of such a group of students.

When mean raw scores are given, it is not a difficult problem for the researcher to use conversion tables and compare achieved scores to national

norms and, then, to students in other institutions. Many studies, however, define their remedial groupings in terms of percentiles but do not specify whether the reference point is to an institutional norm, national norms for college freshmen, or national norms for high school seniors.

Some researchers, of course, provide this information. Fitch (1969) established the mean score at Cerritos College (Norwalk, California) on the English Expression section of the Cooperative English test at 36, compared to a national mean score of 45 for college freshmen. This mean score of 36 put the average Cerritos freshman at the 22 percentile nationally. Students were placed in one of three levels of English with reference to these national percentiles.

The question is, of course, one of validation of success or failure of remedial courses. Heinkel (1969) concluded in his study of low-achievers at San Diego City College that the General Studies Program was ineffective. His students had received scores of 10 which is only the "11th percentile based on West Coast junior college norms [p. 2]" --- in the English Section of the A. C. T. Can these findings be compared, for example, to the positive results obtained by El Camino's English Department, where a different English placement test (Purdue) is used with percentiles given in terms of the school's own norms?

The above is not intended to discourage schools from adopting their own norms but merely to indicate one research dilemma in trying to compare remedial programs or to isolate factors contributing to their success or failure, for there is likely to be a vast difference in innate abilities between a student who scores slightly below a national mean and one who is unable to achieve over the 10th percentile. A program which deals with the latter type of student will have, in many cases, a much more demanding job of remediation with chances of failure being much higher than a program such as Macomb County Community College's Educational and Cultural Development program for students who score between the 10th and 58th percentile (reference group not indicated) on the School and College Ability Test (Ferrin, 1971). Many more students at the higher scoring levels in the latter program would be expected to succeed in school than would those in General Studies at San Diego City College, where the highest score, not the lowest, is in the 10th percentile of a standardized

test (Heinkel, 1969). All of the previous discussion, of course, has not even touched upon the problems of comparisons when different tests are being used.

Summary and Recommendations

Although a number of remedial programs are purported to be successful, many of these evaluations are based on unreliable data. All too often those studies which have found that remedial programs affect neither the persistence nor the performance of low-achievers are the same studies which have used matched control groups and which are examples of careful research. To remedy these problems, a much more concerted effort must be made to collect reliable and valid data on remedial programs. Such research should control, minimally, for curriculum, sex, I.Q., reading ability, achievement scores on English tests, age, ethnic group, and high school grade point average. Furthermore, factors such as teachers' attitudes, counseling, and teaching techniques must be identified and evaluated for their independent impact on their effectiveness on remedial programs.

Gene Kersteins (1971), President of the Western College Reading Association, outlined the major deficiencies of the research on junior college reading programs; they include: (1) poor study designs---the target of the research is not specified; (2) the data are not accurate; and (3) the researchers are often biased in favor of a certain program and are primarily concerned with proving its worth. In addition, remediation efforts are plagued by the lack of reading tests designed for junior college populations. Such tests would permit a more detailed diagnosis of a student's reading problems. Finally, Kersteins pointed out that despite the glut of materials for remedial readers, rarely are adequate reviews and evaluations of these materials available.

Issues like homogeneous grouping are controversial and require more research. Furthermore, junior colleges must decide which criteria they want to use in evaluating remedial programs and must also examine the latent functions of these programs. Do they, in fact, serve primarily as a sieve---a way of ridding the college of its less academic clients---or do they truly attempt to remediate a student's scholastic deficiencies? This question is crucial; the answer to it no doubt will determine the overall success or failure of an institution's remediation efforts.

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CHAPTER 8

RELEVANCE AND MASTERY THROUGH INNOVATION

Roberta Malmgren

Introduction

A survey of innovations in education recalls the old saw, nothing new under the sun, "for the primary thrust of innovative efforts is toward increasing individualization of instruction, a practice dating at least back to Socrates. Questions such as relevancy and democratization of education all fall under this rubric; and the junior college, with its open door philosophy, is especially involved in adapting curricula and instruction to the specific needs of its students.

A great deal of descriptive literature exists on educational innovations, some of which are banal, others exciting, but few evaluative studies have been conducted on them. This chapter will outline some of the major trends in curricular and instructional innovations in junior colleges and, when possible, will indicate evaluative findings on such innovations which appear in the literature.

A semantic problem arises because innovation at one institution may be considered tradition at another. As a rule, however, innovations in the junior colleges fall into one or more of three main categories: (1) those concerned with individualizing instruction; (2) technological innovations; and (3) innovative programs which represent attempts to make education more relevant. There is, necessarily, much overlap in these three categories, the first and third being goals for which the second constitutes the means.

Individualizing Instruction

A number of innovative techniques and approaches to individualizing instruction are currently being developed and applied in junior colleges; the two primary types are programmed learning and, based on similar principles, audio-tutorial instruction. The major research need here is for evaluation of these innovations. An example of the lack of evaluative research comes from a survey of programmed instruction in California junior colleges (Deegan, 1971). From a total of 75 responding institutions, only seven had conducted research on their programs. Furthermore, only 19 reported that they had even purely descriptive data.

Golden West College (California) has established a continuum of innovative techniques which are directly related to the degree of individualization of teaching (Roueche & Boggs, 1968). Seven teaching/learning situations are specified which lead from the conventional teacher-directed method to student-directed behavior. This continuum includes the following seven steps:

1. Teacher directs mastery of content through lecture, discussion.
2. Teacher supervises some drill exercises which student does individually in the regular classroom.
3. Student defines goals and pace of remedial or skills exercises, but this self-instruction is supervised by teacher.
4. Individual- or group-directed case studies.
5. Contemporary problems approach involving interdisciplinary student-selected situations.
6. Audio-instruction in laboratory where student defines the pace and progress of his own work.
7. Student selects materials, media, pace, scope, etc.

Techniques for individualizing instruction include programed instruction, audio-tutorial programs, video-taped lectures, closed circuit television, and tutorial assistance. Often these techniques are offered in a tutorial laboratory. The most common of these is programed materials. Programed instruction was originally defined as involving an active response on the part of the student, immediate feedback regarding the accuracy of the response, and allowing the student to pace his own work. Johnson (1969) wrote that the definition of programed instruction has been expanded to include "replicability and planned sequences of instructional events designed to produce measurable and consistent effects on the behavior of each participating student [p. 74]." In addition, the concept of self-pacing has been dropped.

In the limited literature concerning programed courses, there are conflicting data regarding the actual programs in existence. For example, in February, 1971, the California Junior College Association conducted a survey of the use of programed instruction on 75 California community college campuses (Deegan, 1971). The study found various types of programed instructional media in use: books, machines, audiotapes, videotapes, film loops, laboratory experiments, individualized laboratories (reading and

writing), and audio-slide instruction. Most of these programs had been organized within the last five years. Although the range of subjects utilizing programed materials was wide, the investigator concluded that "very few colleges have made significant progress in the use of well-planned coordinated instruction plans [p. 14]."

In spite of the finding of a common awareness of programed instruction, the above study indicates that the actual use of programing is limited. In addition, a Fall, 1968, study of junior college English teachers showed that, to that date, almost one-third had not worked with programed instructional materials (Shugrue, 1970).

Conflicting with the California Junior College Association study was a 1970 survey by Hinton. Hinton found that 72 percent of the junior colleges in California had instituted, or planned, audio-tutorial programs. (Hinton, cited in MacMillan, 1971) The reason for the different finding is not clear from MacMillan's summary, though a possible cause may be the use in survey questions of the phrase "plan to."

The main issue regarding programed instruction is its effectiveness. Johnson surveyed a number of junior college programs utilizing programed materials. Of 26 such programs, 10 reported positive results; the rest did not report any evaluations. Of those reporting positive results, however, many did not appear to use control groups as the basis for their judgments. One study, at Central Piedmont College, North Carolina, found no significant differences in the effectiveness of programed instruction over traditional methods but concluded that, because achievement was equal for the two matched groups used, programed instruction was superior in that it afforded greater convenience in scheduling as well as a reduction in cost. (Johnson, 1969b).

In a study at San Diego's Mesa College two groups of students were matched for scores on the Cooperative English Test. (Roueche & Boggs, 1968). The first group was taught from programed materials and the second by conventional methods. Two tests were administered to both groups at the end of the course; Test I was designed for those student who had been caught with programed materials and Test II was developed for the control group. Each group took both tests. No significant differences were found between the groups on the basis of the results of Test II; but there was a difference,

significant at the .01 level, when the groups were compared on Test I, with the experimental group achieving higher scores. On the basis of this study, recommendations were made that, if a choice is to be made regarding method, programed instruction should be given preference.

It is important to note that such recommendations for instituting programed instruction, as well as other innovations, are frequently based on the lack of differences of results obtained when innovative techniques are compared to conventional methods (Johnson, 1969b; Banister, 1970). Such decisions are often buttressed by the favorable attitude of students toward programed materials. While this latter factor is certainly important, there is a need for follow-up studies to determine whether student enthusiasm may have emanated from the novelty of the technique or the special attention they received as part of an experimental group.

A more recent innovation appearing in junior colleges which encompasses the technique and philosophy of programed learning is audio-tutorial instruction. Developed by Samuel Postlethwait, a botany professor at Purdue University, this technique combines programed instruction with a variety of media--tapes, films, laboratory work (Johnson, 1969b). The audio-tutorial approach often involves the use of various sizes of groups: General Assembly Session (GAS), the Small Assembly Session (SAS), and the Individual Study Session (ISS). Such a combination permits large lecture sessions, small group quiz section, and individual laboratory work. As with programed instruction the audio-tutorial approach stresses the importance of specifying objectives, of individualizing learning, and of providing feedback.

Johnson (1969b), in his survey of innovation in junior colleges, described a number of audio-tutorial programs. One of these was at Oakland (Michigan) Community College where audio-tutorial instruction was implemented campus-wide in 1965. Oakland's use of the technique was characterized by the flexibility allowed instructors, by special carrels designed for audio-tutorial work, by team teaching, and by a variety of learning experiences. At the time of writing, Johnson stated that no evaluations of the Oakland programs had been completed.

Though virtually no studies indicate negative results of audio-tutorial instruction, the degree of its impact is a moot point. St. Louis Junior

College District has implemented such an approach in science courses (Hunter, 1969). At Meramec Community College in Missouri, a study of 1200 biology students showed that students taught by the audio-tutorial method achieved higher grades and test scores than those in traditional courses. Some 73.9 percent of the experimental students achieved grades of "C" or better, while only 61.3 percent of the controls did so (Johnson, 1969b).

In summarizing the impact of audio-tutorial programs in California junior colleges, John Hinton concluded:

Students in audio-tutorial do learn more, in less time... From three-quarters to ninety plus percent of the students prefer audio-tutorial to conventional methods when they have experienced both. Student performance, according to grades attained, are better in AT presentations than in conventional instruction. (Quoted in Mac Millan, 1971, p. 26)

Furthermore, Hinton discovered that attrition in audio-tutorial programs was much lower than in traditionally taught courses: the dropout rate of audio-tutorial students ranged from 25 percent to 50 percent of the usual attrition rate for regular classes.

Golden West College has applied its concept of innovation to an audio-tutorial biology course which utilizes tapes and student-directed learning in a laboratory situation (Boyle, 1968). Roueche and Boggs (1968), in summarizing this program, noted that compared to previous biology courses, the audio-tutorial approach allowed one-third to one-half more content, that there was a 66 percent decrease in attrition and failures, and that three times as many A's were given in the new course.

Banister (1970) described several programs which he labeled multi-media instruction. Because they are characterized by behavior objectives, some degree of programing, varied media, and an individualized approach, these programs can be considered audio-tutorial. Courses offered include typing, shorthand, mathematics, and biology.

Although this investigator's survey was primarily descriptive, he noted that, compared to traditionally taught courses, the multi-media approach did not appear to be significantly superior. (Criteria for this judgment were not given.) As was mentioned with respect to evaluations of programed instruction, a lack of demonstrated inferiority is often the

basis for supporting audio-tutorial methods. If additional research confirms this lack of difference in instructional approaches, other factors such as cost and convenience may tip the balance in favor of one method. Junior colleges must, however, be certain that these latter two factors do not dictate the choice of approach; therefore, they must commit themselves to continual critical evaluations of innovations and traditional techniques.

Both audio-tutorial and programmed instruction fall under the heading of the systems approach to learning, a phrase which has become increasingly common in the literature on educational innovation. This approach, borrowed from business and government operations, involves defining specific goals which can be measured (behavioral objectives), establishing the means for achieving these goals, and evaluating the results. Johnson (1969b) applied the phrase to the teaching-learning situation:

...systems analysis begins with definitions of changes desired in student behavior...Outcomes having been defined, there follows a series of pretests, teaching-learning experiences, evaluation of achievement, and revisions of procedures [p. 91].

The specificity of the objective is crucial: not only must the goal be carefully defined, it should also indicate the circumstances under which the corresponding behavior will be evaluated and the minimum amount of competence expected. The degree to which junior colleges have embraced the systems approach varies from applying it to the preparation of a single course to committing a total institution to its underlying philosophy. An example of the latter is Oakland (Michigan) Community College.

The National Laboratory for Higher Education (NLHE), formerly the Regional Education Laboratory for the Carolinas and Virginia, in Durham, North Carolina, is a federally-funded agency which seeks to promote change in education through the systems approach, stressing particularly the idea of accountability. Working mainly with colleges, NLHE emphasizes that the responsibility for learning rests with the teacher. As of 1970, 14 junior colleges had begun applying the systems approach advocated by NLHE (Boisseau, 1970a). This involved individualizing instruction, including the packaging of instruction Kits (programed instruction) and the use of various media.

John Tyler Community College is one of the junior colleges working with NLHE. In the fall of 1969, 12 humanities faculty members signed performance agreements--accountability contracts between faculty and administration--in which the instructor promises to produce a certain amount of learning in a specified number of students (Boisseau, 1970b). For example, one instructor agreed that 80 percent of the objectives established for her course would be met by 85 percent of her students. In the future, teachers may not receive merit increases unless they fulfill their performance contracts.

Although extensive gadgetry, such as a multi-media laboratory, may be employed in the systems approach, basic to this approach is the assumption that specific course objectives and the degree of competence expected must be communicated to the student.

There are three major hiatuses in the literature on innovative techniques. The first concerns the rate of retention: Do such methods correspond to cramming material, with subsequent and rapid loss of knowledge? No data exist on this question.

Second, what types of students are most likely to profit from these techniques? Is it primarily the highly-motivated, achieving student who can benefit or are these techniques better suited to the needs of low-achievers? Johnson's (1969b) survey of programmed instruction covered over 20 programs and included both transfer credit and remedial classes; students in both types of programs seemed to profit--or at least did not suffer--from programmed techniques.

One limitation of innovations such as programmed learning and audio-tutorial instruction in the community college is their stress on independent work. As was noted in Chapter 2, several studies of junior college students have indicated that they are less autonomous and rely more on direction from others than their four-year counterparts. For example, at the inception of audio-tutorial courses at Oakland Community College, attendance at sessions was generally voluntary but research indicated that under such a condition student achievement was low and attrition high. Consequently, attendance was made mandatory, a situation resulting in higher achievement and lower dropout rates. (Johnson, 1969b)

A third, albeit much more difficult, area requiring investigation is the ephemeral issue of latent learning. Does a student in a traditional classroom internalize more or less unconsciously attitudes, values, motivations, and skills from both teacher and students which he cannot learn from interactions with mechanical and printed matter alone? This points up a major methodological problem regarding the use of various programmed materials: to what use--and to what extent--should they be incorporated into a class? Should they form the basis of a course or merely be supplemental? Although the greatest contribution of programmed instruction appears to be that it permits individualization of learning, the fact that such instruction releases teachers from more mundane activities is also important:

In colleges the practice of repeating multiple section live lectures intended primarily for conveying factual information is a common example of the misuse of instructor time. When replicable instructional episodes utilizing media are used for this type of learning, instructor time is freed for higher level teaching, discussions, and evaluation or for additional instructional development. (California Junior College Association, quoted in Deegan, 1971, p. 1)

Technological Innovations

With technological advances has come the introduction in education of sophisticated mechanisms and materials. The research priorities delineated for individualized instruction also apply to technical innovation; the effects of such innovations must be ascertained.

The major technical innovation in community colleges is television. The number of closed circuit lectures within junior colleges, however, appears to be dwindling. Johnson (1969b) found few instances of classes offered via closed circuit television. Perhaps one of the reasons for the relative ineffectiveness of television was that originally its unique capacities were not utilized and instead this medium served only to transmit traditional lectures. With the exception of open circuit, public broadcasts, television seems to be most effective as a teaching aid rather than assuming the burden of presenting an entire class.

Open circuit broadcasts to the non-college public may provide a way for true democratization of higher education. Chicago City College's T.V. College, initiated in 1955, has had over 100,000 students register for more than 150,000 courses (Christensen, 1968). Students register in person for classes and go to the college campus to take final examinations. The rest of the work is done in and from the home. Well-organized lectures are given on television and study guides are provided for each class. Papers are mailed in, graded, and returned to the student. Graders are available for telephone consultations. In addition, lists of students in the same geographical area are mailed to students so that they can arrange to study together if they wish. Occasionally, student panels from the T.V. audiences are presented on a televised class session. More than 150 students have earned A.A. degrees via Chicago's T.V. College, and 1600 have completed a large part of the work towards their degree (Kooster, 1969).

Long Beach (California) City College ran an open-circuit T.V. lecture series for credit in health education, which included such topics as quackery, arthritis, and mental illness (Long Beach City College, 1968). Over 2,000 people enrolled for credit and an estimated 32,000 watched the program. As a side benefit, the college estimated that through this venture it received \$200,000 worth of publicity.

Some technical innovations, not yet put into action, are still in the planning stages. One of the most exciting is a Sensorium, planned by Laney College in Oakland, California (Homitz, 1968; Johnson, 1969b). The Sensorium is a geodesic dome which according to Homitz would provide "access to the total sensory apparatus of the student [p. 96]." It includes stereophonic sound; simultaneous front, side, and rear motion picture projection; atmospheric control which permits a temperature range of from 40° to 80° in minutes; aromatic control; and a floor which can be tilted or shaken. Due to lack of funding, however, Laney College has abandoned its plans to construct the Sensorium for the time being.

Programs to Make Education More Relevant

The third major area of innovation is concerned with attempts by junior colleges to give education more relevancy, a word which, though it has become a cliché, nonetheless sums up a pressing need in higher education. Relevancy may be construed as a concerted outreach by junior colleges into the communities they serve. A summary of some of the attempts being made by junior colleges to adjust to contemporary and immediate situations is presented below.

Chicago City College, already cited for the impact of its T.V. College, has become especially involved in bringing higher education to non-student populations (Koester, 1969). Its Urban Skills Academy offers a literacy course for adults ranging in ages from 19 to 70, which increases reading levels from third to sixth grade in three months.

Malcolm X College, one of the City Colleges of Chicago, operates an Allied Health Program, which trains people for health and medical jobs. Originally organized to provide 28 weeks of basic education and on the job training for semi-skilled occupations, the Allied Health Program has been expanded to include two-year programs for courses such as inhalation therapy.

A major thrust of the City Colleges of Chicago is to work with large agencies within the city. For example, in conjunction with the training of its Allied Health students, C.C.C. has a large-scale contractual agreement with Cook County General Hospital. In addition, in affiliation with City Hall the C.C.C. operates the Public Service Institute, which trains people for civil service and law enforcement occupations. Presently, all police recruits take one-fourth of their courses through the City Colleges.

Malcolm X College, with a predominantly black student enrollment, is located in the West Side ghetto of Chicago and is intensely involved in attempts to ameliorate the impoverished conditions of the community. In addition to operating the Allied Health Program, Malcolm X offers such programs as basic literacy classes and extension courses at a nearby boys' reformatory.

A number of junior colleges are utilizing mobile instructional, recruiting, and counseling units to reach non-student populations in their communities. Such schools are Los Angeles City College, Central Seattle City College, and Contra Costa College (Richmond, California). Sponsored by Cerritos College (California), in Spring 1970, Mexican-American students went from door-to-door in the Mexican-American community to discuss the college. If individuals expressed interest in pursuing the subject further, counseling appointments at the school were made for them. In the course of four Saturdays of such canvassing, 170 people, mainly adults, made appointments with Cerritos College counselors. Perhaps the most significant finding was that, although these people all lived within a radius of two to five miles from campus, their knowledge of courses and admission procedures was extremely limited. Generally, most of these adults assumed that a high school diploma was a prerequisite for enrollment and they did not know that there were no tuition fees nor that they could attend part-time or evenings. These adults were frequently unaware of the various vocational/technical programs or courses in English as a second language.

Another example of a junior college committed to serving broader community needs is Pasadena City College. Through its Community Adult Training Center, four major educational programs are offered to residents of the junior college district. These programs include adult basic courses such as literacy, high school credit courses leading to a diploma, general adult interest courses such as art and music, and vocational courses. Since its inception in 1968, the Community Adult Training Center has placed over 2,000 of its vocational students in jobs. The vocational courses range from electronics to merchandise checking and vary in length from six weeks to a year. The Center's vocational programs are often organized to meet a specific request from outside firms or agencies. Pasadena's adult courses are offered in some 70 locations in its district. This trend of establishing satellite centers is increasing: many junior colleges have offered classes in churches and elementary and secondary schools as a means of reaching more community residents.

Although all junior colleges will not be able to become as involved in their communities as Malcolm X or Pasadena, it is apparent from studies such as that of Cerritos College that they can at least do more to inform their communities of the opportunities available at local campuses.

In addition to community outreach attempts, curricula are being developed within junior colleges themselves to provide education and training in contemporary fields. One of the most recent trends in such endeavors is the offering of courses in ecology. An issue of the Junior College Journal was devoted to surveying ecological education efforts in junior colleges. Between 1966 and 1970, the number of environmental programs offered in community colleges rose from 6 to 50, with at least 25 more being planned (Pratt, 1971b).

In the summer of 1970, a workshop, the Community College Environmental Ecological Technician Education Workshop, was held in Denver, Colorado (Pratt, 1971a, 1971b). Sponsored by the United States Office of Education, the workshop had two main objectives: (1) to develop an interdisciplinary ecological course and (2) to outline a basic educational core for other environmental programs. Three occupational educational categories were specified, including both A.A. degree and non-degree programs which train junior college students as ecological technicians.

Newton (1971) wrote that pollution control is the main focus of the newly developed environmental programs at junior colleges and lists examples of program titles: Pollution Abatement Technology, Environmental Engineering Technology, and Water and Wastewater Technology. Programs range from those with an engineering format to those which are primarily scientific in orientation. Some of the problems in establishing an environmental curriculum include identifying local employment potential, publicity for the program, and cost of the equipment required to effect such a program.

In addition to occupationally oriented environmental education, junior colleges are developing ecology courses for general education. Twenty-two junior colleges are cooperating in the preparation of "Man and Environment," a general education course which, according to McCabe (1971), is designed

to provide "a broad understanding of the basic concepts concerning man and his environment...[p. 16]." Faculty members from the participating junior colleges are collaborating to produce an extensive, flexible course outline and materials for the course.

Implementing Innovative Programs

One final question to be considered regarding educational innovations concerns the factors at a junior college which contribute to its willingness to attempt innovations. Johnson (1969a) listed five such factors. The first is that a college give its teachers the right to fail if they wish to try new methods. A second is the staff's knowledge of new developments. Delta College (Michigan), for example, sent 14 of its faculty members to visit 64 innovative centers of higher education. Several colleges have established innovation centers where their faculty members may learn about or try out innovations (Koester, 1969; Johnson, 1969a). Third, the faculty must be involved in innovative efforts.

A fourth element is the existence on campus of a person who is an agent of change, or in Johnson's phrase, "Vice-President in Charge of Heresy" (1969b). An idea borrowed from a speech by Philip Coombs, this Vice-President in Charge of Heresy has been institutionalized in the Educational Development Office. The E.D.O. is a community college staff member whose job is to promote instructional improvement, particularly in the application of the systems approach to learning (National Laboratory for Higher Education, 1971). The E.D.O. assists faculty by training them in innovative skills, as well as in evaluating learning. He is committed to the discovery and application of new methods and to a constant revision of instruction. The staff of the National Laboratory for Higher Education is currently working with E.D.O.'s from 20 junior colleges.

The fifth factor contributing to innovation in a junior college is the institution's willingness to provide time and money for innovative experimentation. Many junior colleges argue they cannot afford the cost of such experimentation. In Johnson's survey (1969b) of programmed instruction, however, most institutions found that costs were reduced when

such instruction was used. The initial installation of audio-tutorial systems and equipment appears costlier at first, but it is possible that the long-range costs, when such factors as staff reduction are considered, may be similar to or even less than traditional systems. Some schools, such as Meramec Community College in St. Louis, believe that the audio-tutorial approach is the more economical one (Johnson, 1969b). In addition there are occasional fringe benefits to the junior college when it innovates, as in the case of the publicity which Long Beach City College received from its televised health class. In California, in 1970, the state legislature passed a bill (The Fong bill) which permitted more flexibility in state support for instructional assistance programs (Deegan 1971).

Perhaps the most vital question to be asked concerning the desire to innovate is not whether an institution wishes to experiment with new gadgets and systems but rather whether it is willing to question basic values and assumptions about higher education. Otherwise, the implementation of innovations will not radically improve instruction but will merely disguise mediocre learning conditions with an overlay of technological frills and philosophical verbiage, a situation analogous to frosting a stale cake.

Stanley Ikenberry (1971), in an article which stressed the limited improvement in higher educational instruction in the past century, wrote that basic values obstruct educational change. Ikenberry lists four such assumptions which must be reconsidered: (1) the arbitrary time limits set on learning--within a certain number of hours each week and for a set period of weeks, all students are expected to learn the same specified amount of knowledge; (2) the normative grading system, which stresses the relativity of performance as compared to others rather than the student's own learning; (3) the clinging to symbols of education, such as credits and the value of four years of college, to the detriment of ideal objectives of learning; and (4) colleges' commitment, through normative evaluation, to screening out less able students, rather than focusing on improving the performance of all learners.

In short, to quote Ikenberry:

The failure of previous college and university instruction systems to make steady and significant gains in effectiveness is not traceable to a failure to utilize

technology or to try innovative approaches in teaching. The failure relates to unexamined values and assumptions...

A reordering of values and assumptions is an essential prerequisite to resolving the crisis now confronting higher education. [p. 80]

Conclusion and Recommendations for Further Research

Research on program and instructional innovations in junior college has produced some evaluative data, but there is conflicting evidence regarding the relative merits of various innovations. Due to a variety of possible objectives, some programs, such as publicly televised classes, cannot easily be evaluated.

Instructional techniques lend themselves well to experimentation. Program innovations, however, such as ecology courses or Laney College's Sensorium, have broader, more elusive goals related to self- and environmental-awareness. Homitz (1968), for example, compared one facility of the Sensorium, touch control (a wheel attached to seats and which has a variety of texture), to the "feelies" of Huxley's Brave New World. One cannot help but think that such a total sensory approach will enhance a student's experience--but in what way? Junior colleges must be wary of pursuing innovations for their own sake. There is an urgent need for these institutions to first examine traditional objectives rather than focusing only on traditional techniques and programs.

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CHAPTER 9
COUNSELING DIVERSE STUDENTS

Ronald Hart

Introduction

Community colleges are multipurpose institutions. Most are required by law to maintain an open admissions policy. As a result, the student bodies of community colleges are markedly heterogeneous in range and type of ability, background, and aspiration. To serve these students, the curriculum is a broadly diversified series of courses which range from university transfer programs and continuing adult education, to terminal programs of vocational training and general education. In such a multifarious milieu, it is not surprising that students experience some difficulty and confusion in planning a course of study which is commensurate with their educational and vocational goals.

The situation appears even more complex when we consider the fact that many college students are initially uncertain about their educational and vocational plans, and about their own capabilities. It is highly improbable that they can make reasonable educational choices unaided. They need adequate information and guidance regarding the nature and purposes of the various curricula, regarding their own personal capacities and interests, and regarding occupational opportunities and educational requisites in their chosen fields. To answer these needs, most community colleges have established specialized, professional guidance and counseling services in order to help students make optimal use of their own resources and those of the college. "Guidance and Counseling" is considered one of the major functions of community colleges (Johnson, 1969; Medsker, 1960; Thornton, 1966).

A considerable body of literature exists which attempts to describe, analyze, compare, and evaluate the guidance and counseling programs of community colleges. This chapter is an attempt to identify the major issues in community college counseling and to cite representative works.

In surveying the literature, one is struck by the diversity, even confusion, of ideas of those working in this area. One must agree with Sorenson (1968) that there is considerable ambiguity, disorder, and paradox in the theory and practice of counseling. There is no common language; there are serious disagreements over the aims which community college guidance and

counseling programs should attempt to accomplish; there is divergence of opinion concerning the techniques to be employed. These differences are not always explicit, but they do represent, in the final analysis, real ethical and philosophical disagreements, as well as real practical implications.

Philosophical Considerations.

At first glance it might appear difficult to relate particular guidance programs to more general philosophical principles. Many student personnel programs appear to be scarcely more than an uncoordinated series of ad hoc encounters between student and faculty, and student and administrator, unguided by any general, integrative framework of ideas. As O'Banion (1971) indicated, most community college student counseling programs "lack a sense of mission, commitment, or community [p. 77]." Nevertheless, if one examines the policies and modes of operation of even the most piecemeal programs, certain implicit aims and values are discernable. Administrators may not always articulate these values; nonetheless, they are being operationalized through administrative programs.

For purposes of this discussion, we will identify two general schools of thought, or philosophical perspectives. The more traditional view we will call the "Social Ethic." Representative of this position are such commentators as Thornton (1966) who stated that the true measure of the stature of an educational institution should be the number of young people it prepares well for their roles in life. He suggested that inasmuch as technology has created a demand for more people in positions requiring more educational preparations, the task of higher education is to satisfy this demand. Concurrently, the President's Commission on Higher Education (1948) spoke of the "social role of education [Vol. I, p. 5]." A similar viewpoint was expressed by Francis Horn (1956) who feels that the central concern for the colleges is how to "provide graduates prepared for the thousands of specialized tasks which must be carried on in our technological civilization, and at the same time prepared for the demanding responsibilities of intelligent and informed citizenship [p. 312]."

Other illustrations of the "Social Ethic" viewpoint include Maurice Smith (1967) who suggested, in response to the question "What is Junior College Counseling?", that one of the major aims is "to assist both students and teachers to understand, develop, and provide those human relations experiences which are involved in problems of adjustment [p. 1]." A similar perspective is reflected in the words of Henry Nelson (1956) concerning the general philosophy of education, and by implication the aim of guidance programs within the general educational process: "Decisions as to what should be taught and the way it should be taught are made by reference to the usefulness of the knowledge in everyday life. Knowledge is conceived of, not as an end in itself, but as a means to a more abundant personal life, and a stronger, freer social order [p. 37]." Commentators of this persuasion, we can conclude, define the aims of education primarily in social terms, that is, education is in the first instance a means of satisfying the needs of the society for responsive citizens, and for trained, efficient workers. Implicit in these views is a philosophy of education and counseling which O'Banion (1971) concluded "is paternalistic at best, and autocratic at worst. From this perspective the educational process has been educare, 'to put into'; students have been the passive recipients of education as a product [p. 7]." He sees counseling programs which are predicated on this model as merely a series of services reacting to forces within the college community.

In the past few years there has begun to emerge, as a counterpoise to the "Social Ethic," a series of views, which, taken together, comprise a "Humanist Ethic" or philosophy of education and counseling. This view is based on the notion of educere, "to lead out of." Counseling programs predicated on this philosophy attempt to create a facilitative atmosphere in which students can increase not only their skill competencies, awareness and acceptance of others, and their intellectual understanding, but will also grow in flexibility and creativity, awareness and acceptance of self, courage to explore and experiment, openness to experience and gain a useful value system and a satisfying life style. O'Banion (1971) suggested that counseling programs which adopt this orientation will give the student an opportunity to be introspective, to examine his own values, attitudes, beliefs and abilities, to examine how these affect the quality of his relationships with others, and to broaden and deepen a developing philosophy of life.

These sentiments have been echoed by other commentators. Nevitt Sanford (1967) concluded that

...the time has come for us to control our zeal for imparting knowledge and skills, and to concentrate our efforts on developing the individual student... By education for individual development, I mean a program consciously undertaken to promote an identity based on such qualities as flexibility, creativity, openness to experience and responsibility [pp. 2-9].

Sorenson's (1968) formulation of an instructional model for counseling, is also suggestive of the new mode:

Since the essence of freedom is choice, the person who has more alternatives available to him is more free than the person who has fewer. Freedom does not merely depend on the lack of external constraints; more importantly, it entails the absence of internal constraints. Freedom requires knowledge, imagination, and self-confidence; and the person who possesses these traits has more choices available to him than one who is ignorant, and lacking in imagination and self-confidence [p. 6]

Other notable statements of the emerging Humanist perspective are to be found in McConnell's forward to the Carnegie Report (1964) and Matson's "Guidelines for Student Personnel Services in Junior College" (1967). Proponents of the emerging model see the student guidance and counseling programs of community colleges as the most significant force within the institutions for humanizing the educational process. The student personnel worker of the new mode would no longer act as an interpreter of the institutional philosophy, but would help students elucidate their own personal value schedules against which the institutional philosophy could be judged.

This philosophical dichotomy is a theme which runs through the literature on community college guidance and counseling. In the following pages we will summarize the current public discussions on a number of salient issues in the student personnel field. Although the literature focuses on the day-to-day, concrete concerns of organizing and administering counseling programs, beneath these surface considerations can be detected the underlying philosophical concerns.

Organization and Administration of Guidance and Counseling Programs.

In large measure, the literature on the organization and administration of community college guidance and counseling programs are discussions of what such programs ought to be, but are not. The National Committee for Appraisal and Development of Junior College Student Personnel Programs (see Raines 1965) has devised a Basic Program or model for community college guidance and counseling programs. Judged against this standard, the extant programs of most colleges are deficient in the extreme. Raines (1965) reports that those functions designed to coordinate, evaluate, and upgrade student personnel programs are ineffective in nine out of ten institutions. There is a lack of professional leadership; student services are poorly coordinated, poorly staffed, and poorly understood by students, faculty, administrators, and the community. Although there is a plethora of articles calling for more professional counselors, more financial support, more coordination among faculty and administrators, and more research, there is a dearth of studies which offer a systematic evaluation of current programs, and almost without exception, those articles which do deal with actual counseling programs are more descriptive than analytical (Capper and Gaddy, 1969). These limitations should be born in mind by the reader as he proceeds to the following summary of discussions on major topics found in the literature.*

The Role of the Faculty

In the past few decades, with the development of specialized, professional student guidance and counseling programs, the participation of faculty members in these endeavors has waned. Nevertheless, in absolute terms, the faculty of community colleges are still very much an integral part of these functions, and Robinson (1960) even detected something of a resurgence in faculty involvement.

* A major study which will be a significant contribution to the understanding of the state of development of community college student personnel services is The AAJC Survey currently in progress under the direction of Dr. Jane Matson and sponsored by the Esso Education Foundation. Results of this study are slated for publication in the Fall of 1972. Preliminary findings have been reported in J.E. Matson, A Perspective on Student Personnel Services (Junior College Journal, 1972, 4(6), 48-52).

Guidance and counseling programs usually include four closely related functions: (1) orientation to the college, (2) educational advisement, (3) occupational guidance, and (4) personal counseling. There is not always a clear demarcation between functions, and counseling in one area usually entails at least some marginal counseling in other areas. Therefore, it is not surprising that faculty members, whose participation in educational advisement programs is vital, should also perform guidance duties in other areas of counseling. In practice, however, their competence (and formal training) for counseling in areas other than educational advising is limited. Hedlund (1968) found that the faculty of New York community colleges were relatively uninformed about the performance of many student guidance services. Starr (1961) surveyed the community colleges of Colorado and found that although regular faculty members routinely served as counselors, they lacked adequate counseling materials and were not always adequately trained to do personal counseling.

Some observers have found merit in a rather strict division of labor, allowing faculty to use their expertise to advise students on educational matters, leaving the more complex personal counseling and vocational guidance to professional counselors. Fahsbender (1969) found that faculty members who were specifically selected for advising functions, and who were given released time from teaching, were preferred by self-reliant students as a source of advice on educational matters. Students reported that they sought adult helpers who were available, who were authorities in the student's major field, and who showed concern for the student as an individual. Students were satisfied with the assistance received from both professional counselors and faculty advisers, but preferred to be assigned to faculty advisers, primarily for reasons of availability and expertise. The academic progress of these students was not adversely affected by assignment to faculty advisers. Thus, the professional counselors were freed for more intensive personal guidance for those students who were less certain of themselves, and less certain of their goals.

Other analysts have argued that the question is not whether faculty should, or should not, be involved in counseling, but rather in what manner they should participate. Some community colleges have begun to utilize the faculty in two

complementary ways. First, faculty members are being trained to perform some personal counseling services. A future trend and demand for the professional student personnel worker as a behavioral scientist who can train and direct faculty to help students was seen by Matson (1967). Tiller (1969) suggested the importance of counselors taking the initiative to recruit faculty members to serve on guidance teams.

The second type of faculty involvement was described by Robinson (1960) who claimed that the faculty have a responsibility to cooperate with the student personnel counselors and to participate in the planning and development of student guidance programs. At some colleges, such as Illinois Central College, faculty members fulfill this responsibility by serving as consultants to counselors (see O'Banion, 1971). Blocker, Plummer, and Richardson (1965) suggested that student counseling specialists should maintain offices within the various academic departments, and attend faculty meetings so that close proximity can encourage a closer contact with faculty members, and in this way explore the unique counseling needs of each discipline. Similar proposals have been offered by Blocker and Richardson (1968) and by Harvey (1967). O'Banion (1971) reported that William Rainey Harper College (Illinois) and Forest Park Community College (Missouri) have instituted such decentralized programs. It should be re-emphasized, however, that these comprehensive approaches to counseling, are the exception, and not the rule.

If it is reasonable to consider the role of the teaching faculty in the counseling program, by the same logic it is sensible to explore what contributions the counseling staff can make to the area of teaching. Some colleges have found that not only do counselors have a special competence to teach particular subjects, they also become better counselors as the result of the direct and continuous contact with students which teaching entails. Moreover, as teachers, they have a chance to influence curriculum development. For example, the counseling staff at Fulton-Montgomery Community College (New York) is involved in teaching in both of these ways. The Student Personnel Division has been organized as an academic division. Counselors serve as instructors in the Seminar on College Life, a credit course in which the student examines his own beliefs and abilities. Moreover, the division defines as its first priority the assistance of other

divisions in developing and modifying courses and curricula in order to better meet the needs of students, and, if this is not feasible, it must assume the task of developing these programs within the Student Personnel Division (O'Banion, 1971).

Student Response to Counseling Programs

The response of students to available guidance and counseling services varies markedly from campus to campus. Axiomatically, on campuses where the student personnel services are little understood, the student response to them is low. O'Banion's (1969) survey of Colorado community colleges found that students were only vaguely informed of the services available, and were generally apathetic to the student personnel program. He concluded that the low student response was a function of a lack of adequate information. This conclusion is substantiated by the findings of Knoell and Medsker (1964) which showed that junior college students transferring to four-year colleges gave a generally low rating to the counseling and advising they had received at junior college, although they did give higher ratings to the junior colleges than to the counseling services offered by the four-year colleges. Large percentages of students said they were not counseled either at the junior college or after transfer. They reported that they had not been aware of the availability of counseling services at the time they had problems of adjustment, nor had they been able to obtain satisfaction from their faculty advisors. The problem is exacerbated by the traditional style of counseling, which is essentially passive: the counselor waits in his cubicle for the student to initiate the encounter. Thus counseling programs suffer from a continued low saliency. Students do not know what services are available to them, and thus do not avail themselves of them.

Collins (1969) suggested that student response to counseling programs is primarily a function of the personal motivation of individual students. He concluded that those students who are most in need of counseling are those who are least likely to seek it and, conversely, those who seek it are those who are already most highly motivated. Sensor (1967) found that three-fourths of the students in his survey who finished the second year of junior college

indicated that they had received good or excellent counseling; by contrast, a survey of drop-out students showed that they most often mentioned adequate counseling as the factor which would have most improved their college situation. He suggests that there was a critical counseling differential between the two groups. Counseling may be an effect, as well as a cause, of academic achievement.

Student response to counseling may also be a function of students' judgments about what are appropriate subjects for counseling. Fahsbender (1969) found that students felt capable of solving their own personal problems; when they needed help on educational problems they preferred to see a faculty advisor rather than a counselor. Sensor (1962) presented parallel findings from Riverside City College (California) which indicated that the majority of students normally solved their personal problems without counseling assistance. Students indicated that they considered educational and vocational planning and related academic matters as appropriate issues to discuss with the college counselor. Guidance on personal problems was not included on the "appropriate" list. The low response which junior college students demonstrate toward guidance and counseling programs is in part a carry over of the generally poor image of high school counselors. Moreover, junior college counselors are often perceived as insufficiently prepared, either personally or professionally, to deal with the personal problems of students.

The Counseling Staff

Who are the people who become college counselors? What is their background? Their personal attributes? Their views and motivations? These are important questions in assessing student counseling programs, but unfortunately the literature throws very little light on the subject.

Professional Competence

It seems safe to conclude that the level of professional competence of college counselors is discouragingly low. Humphreys (1952) found that professionally qualified personnel workers were not used in sufficient numbers, and adequate in-service training for staff members was generally lacking. Raines (1965) discovered that in more than half of the colleges studied, the counseling and

guidance services were inadequate; the problem stemmed from a lack of progressive leadership and a dearth of trained staff members. O'Banion reported that although counseling staff members of the nine Colorado community colleges he surveyed had good professional preparation, their numbers were insufficient, and there was little provision for in-service training. Matson (1965) suggested that the problem stems, in large part, from the fact that university graduate training programs with special emphasis on junior college personnel needs simply are not producing a sufficient number of graduates to fill the employment needs of the junior colleges. Of course, economic constraints on hiring are also a factor.

In the face of this shortage of trained personnel some alternative staffing arrangements are being tried. Sloan (1970) recommended the use of paraprofessional aides to release counselors for the more challenging tasks. This has been implemented at Meramec Community College (St. Louis). Pyle and Snyder (1971) found a similar arrangement at Harrisburg Area Community College (Pennsylvania) where students were selected for the paraprofessional training program. Los Angeles City College has experimented with the use of minority students as paraprofessionals to provide supportive counseling for fellow minority students with notable improvement in retention rates and grade point averages.

It should be noted, however, that there are certain risks involved in utilizing paraprofessionals. Although Pyle and Snyder (1971) reported that paraprofessional student counselors succeeded in reducing the psychological tensions and frustrations of minority students, there was no assurance that the problems were resolved. Reduction of tensions may simply be a means of momentarily postponing the reckoning of structural inequities in the educational system.

Another effort at alleviating the shortage of qualified junior college counselors is the program instituted by Lane Community College (Oregon) to use their own facilities to train junior college counselors. In conjunction with the University of Oregon, Lane offers three hours of graduate credit in community college counseling, and supports its students with a \$75 per week stipend.

Personal Attributes

A second consideration in assessing the quality of community college counseling staffs is the rather more intangible factor of the personal attributes of the individual counselors themselves. What has motivated most counselors to go into this field? What personality types are most attracted to junior college counseling positions? On this topic of paramount importance there is virtually no information. Whitely and Allen (1968) called for more research on human qualities which are most relevant to counseling. Likewise, C. G. Wren (1952) concluded that the relationship between certain human qualities and good counseling is still an open question because attempts to evaluate the problem have been sporadic and unrelated at best. Although we know little about the actual distribution of personality types in such positions, we do have some suggestions about what it should be.

O'Banion (1971, p. 10) sees the need for counselors who are the kind of persons described by Marlow as "Self-actualizing," and by Horney as "Self-realizing." They should be open to experience, democratic in their dealings with students, loving, and nonjudgmental. They should tolerate ambiguity rather than insisting that students always have clear vocational and educational goals and programs. They should risk involvement with students on a personal level, and should be open to self-encounter.

It should be apparent that such considerations as the personal attributes of counselors are in the final analysis discussions of counseling philosophy. A facilitative model of counseling requires a complementary type of counselor in order to operate well.

Counseling Programs: Substance and Technique.

There is a great variety among the guidance and counseling programs of individual community colleges. Not only is there disparity with regard to the aims--and the quality--of the programs on specific campuses, there is also a lack of similarity with respect to the range of counseling services offered, and with respect to the counseling techniques and procedures employed. Comparison, and evaluation therefore, becomes a herculean task.

In order to establish some basis for comparison and assessment, the National Committee for Appraisal and Development of Junior College Student Personnel Programs (see Raines, 1966) devised a standard model or basic counseling program. The essential features of the model are as follows:

1. Orientation
 - a) conducting orientation classes
 - b) teaching effective study skills
2. Educational Advisement
 - a) assisting students in selecting courses
 - b) interpreting curricular requirements
 - c) interpreting senior college requirements
 - d) interpreting tests results to applicants
3. Personal Counseling
 - a) administering and interpreting diagnostic tests
 - b) conducting counseling interviews (individual and group)
4. Vocational Guidance
 - a) identifying courses of occupational information
 - b) studying manpower needs within the community
 - c) interpreting aptitude and vocational interest tests

In this section of the literature survey, we will review the substance and technique of these student services as they are developed on particular campuses, and the salient issues entailed in each respective service.

Orientation

In-coming students need to be acquainted with the regulations of the college, procedures for enrollment, the nature of available student services, etc. In order to present this information in a systematic fashion, and to assure that all students receive it, almost every college has some form of orientation program. Usually, this consists of a one- or two-day series of lectures to new students, supplemented by brochures and other printed information. The aim is to minimize the confusion of the student, and to expedite the work of the college administrators.

Some colleges go a step further and utilize the orientation sessions to instill a sense of school pride and personal involvement. An example of such programming is the Freshman Orientation Camp at Rochester State Junior College (Minnesota) described by O'Banion (1971). "The goals of freshman

camp are to unite (the students)..., to initiate in each freshman a positive attitude of pride toward Rochester State Junior College, to stimulate a desire in the student to be active in the life of the college...[p. 57]".

In some schools, however, there is a shift away from the conception of orientation as a process of preparing the student to fit into the procedures and expectations of the college. In these colleges, orientation is more than a giving of information and more than a generation of school identity. Rather it is a time when each student is challenged to think about the broader question of the meaning of the educational processes, and its relevance to him. Since this kind of indepth evaluation is difficult in a one- or two-day series of mass lectures, some colleges now require students to attend non-credit orientation classes once a week for the first term. In the 12-week orientation course at Grossmont College (California), students are made to realize that they must take the major responsibility for educating themselves. The course deals with such topics as student and human rights, alienation, and adjustment to college life. In such orientation programs, the students get involved by examining their reasons for coming to college, by exploring their value systems, and meeting faculty and peers through informal association. These changes constitute a shift in the philosophy of orientation programs, a shift in emphasis toward more academic-intellectual goals instead of toward socializing the student and making him "feel at home."

Educational Advisement

Traditionally educational advisement has had two major concerns: (1) to assist the student in selecting a course of study which will satisfy the requirements for the transfer or terminal program of his choice, while giving him sufficient breadth of classes, and (2) to help the student develop adequate study skills to optimize his academic achievements.

Many community colleges define such advisement as lying primarily within the faculty's expertise, and most faculty members therefore perform this function. The system used by New York's Fulton-Montgomery College is an example. All faculty members were assigned students to advise, according to their academic major, but an assessment of the system showed serious deficiencies in the quality of contact between advisors and advisees. In large part, faculty members lacked a sense of commitment, as well as sufficient interpersonal

skills. Accordingly, a seminar on College Life-Academic Advisement was instituted. Interested faculty were recruited, given released time from teaching, and trained in biweekly inservice sessions and workshops. Assignment to class sections were not on the basis of major, so that each class was heterogeneous; this was to facilitate the exchange of ideas about the educational process.

Advisement programs such as this are designed to meet Tillery's (1969) requirements for an effective advisement program: (1) a regularized, longitudinal advising procedure, and (2) a close and continuing relationship with counselors. Thus advising becomes not merely assignment to courses and checking of prerequisites, but the development of a framework of ideas about education. As Donovan (1970) suggested, educational advisement should be a blend of learning theory and counseling technique.

The literature on junior college educational advisement programs suggests that the results are by no means uniform. In some cases counseling has been identified as a primary factor in increasing grade-point and retention rates; in other instances, counseling has produced no significant change.

At Glendale Junior College (California) Dessent (1964) found that 56 percent of the students who received a combination of unstructured group counseling and individual counseling achieved grade points of 2.0 or better, whereas only 26 percent of uncounseled students achieved that academic level.

Lorberbaum (1968) measured the success of an extensive personal and academic counseling program at Dalton Junior College (Georgia), and found that 50 percent of the counseled students did satisfactory and respectable work, while 25 percent remained on probation and 25 percent failed. However, there was no indication from this study that the achievement of satisfactory grades was related to the counseling program.

At Merritt College (California), Farley (1968) compared the grade points and unit loads of a counseled group and a control group: the mean grade point average of both groups was identical (1.2), and the mean unit load of the groups was also identical (8.5). But, it was found that counseled students had an overall better record of persistence, although at the high end of the range (eight semesters or more), the uncounseled group surpassed the

counseled group. The persistence ranges were as follows:

	<u>Counseled</u>	<u>Uncounseled</u>
8 or more semesters	2.8%	4.1%
7 semesters	4.2	4.1
6 semesters	7.0	7.0
2-5 semesters	63.5	40.3
Did not return after initial fall semester	22.5	44.5

Kunhart and Roleder (1964) presented findings which are contradictory to those of Farley. They divided potential drop-out students into three groups. The first received directive counseling (i.e., were made aware of their drop-out potential and counseled accordingly); the second group received non-directive counseling and the third received no counseling at all. The results of this study showed no significant differences in drop-out rates among the three groups.

It is apparent from these disparate findings that a summary statement on the relative success of junior college educational counseling would obscure more than it illuminates.

Personal Counseling

Personal counseling has been traditionally conceived as a program to help students cope with personal and emotional problems which might interfere with their studies. Customarily, counselors have limited their clientele to the few students who came to them seeking counsel on such problems as family discord, social adjustment, emotional stress, and more basic personality and psychological matters. Thus the traditional emphasis of community college counseling services has been to formulate immediate, if somewhat provisional, remedies to keep the student in the classroom and library.

The first priority of personal counseling seems to be to safeguard the student qua student. The values assigned to success in this mode of counseling are apparently more institution-oriented than individual-oriented. Persistence in school and lower attrition rates rather than self-assessment and self-discovery seem to be the organizing principles.

O'Banion (1971) and others have argued, however, that it is not natural for people to conform to social roles, especially when this leads to alienation, de-personalization, other-directedness, and lack of commitment. They have found that provisional relief from current emotional stresses may prolong, even aggravate, the problem, because such treatment may not be sufficiently comprehensive to get at the underlying causes.

They have seen that it is difficult to adjust an individual to his social situation if he has been incapable of making the necessary internal adjustments required for self-acceptance and self-validation. Consequently, the counselors of the new mode operate within a different definition of the counseling function.

Counseling, they maintain, should not be a series of services designed to insure social adjustment; rather it should be a personalized experience in which the counselor acts as a catalyst or facilitator to help the student find his own direction, learn to direct his own affairs, to be open to experience, realize his full potential and awaken his own creativity (O'Banion, 1971). The emphasis should be changed from psychoanalytic and behavioristic theory to existential and humanistic theory.

Counselors of the new mode no longer wait passively until students approach them; rather they actively encounter students where they are most likely to be found. In Portland Community College, for example, counselors are located wherever students are likely to congregate: in the library, cafeteria, study areas, faculty office areas. Desks are located in relatively open fashion similar to office areas in banks. In this way counseling is not limited to a selected clientele, but takes on the dimensions of a public mental health program.

This does not mean that specialized services are ignored. For example, Flint College (Michigan) has developed a counseling program for adult women and for the physically handicapped. Pierce College (California) has a counseling program with referral service for emotionally disturbed students who are having problems concerning such things as drugs, pregnancies, and suicidal tendencies; student response to this program has been overwhelming. But under the new counseling mode, such services are not isolated programs, but are integrated into a more comprehensive and facilitative approach to counseling.

One technique which seems to be gaining in popularity is that of group counseling. This technique has various names such as sensitivity training, group encounter, and T-groups. The rationale is that group members benefit from the encounter and support of their peers. It is believed that in such situations, the individual is better able to develop a sensitivity and awareness of himself and others which helps him to become more open and trusting, to learn to deal with the here-and-now, and to get in touch with his own feelings. At Kendall College (Illinois) such group seminars focus on the positive conviction that each participant has something right with him; sessions focus on individual self-discovery and group reinforcement of personal strengths, capacities, and success experiences. At Santa Fe College (Florida) counselors structure the group situations to focus on subjective feelings and emotions, rather than on objective observations and abstractions. Students receive three hours of transferable credit.

Thus, the new mode of counseling appears to move the counseling experience back to first questions, to address the more total emotional needs of the student, rather than to deal solely and directly with the more immediate concerns of grade point, attrition, and adjustment to the college routine. This perspective defines the end of education and counseling in terms of personal growth rather than as preparation for social roles.

Vocational Guidance

Most community colleges provide some vocational guidance services for their students. Generally, this consists of compiling information about the employment needs within the community, and making such information available to the students. Some schools, such as Georgia's 25 post-secondary vocational-technical schools, hold annual "TEACHDAYS" during which representatives from industrial firms across the state come to campus to explain employment possibilities and to recruit. In these instances, the vocational guidance program consists primarily of vocational placement.

In other colleges, the vocational services entail a combined occupational/educational guidance program. For example, in Danville Junior College (Illinois), one of the major purposes of the vocational guidance program is "to help the students discover their occupational potential and establish realistic employment goals. The counselor interviews the prospective student, and through a

minimum of formal testing, places him in appropriate academic and vocational classes" (O'Banion, 1971; p. 34). Too often, however, the definition of "appropriate" is based on existing employment demands rather than on the aspirations of the student.

Clark (1960) pointed to the insidious "cooling out" function which community college vocational guidance programs often play. Hidden behind such rhetorical descriptions as "assisting students in evaluating their own abilities, interests, and aptitudes, assaying vocational choices in light of this evaluation, and making educational plans to implement their choices," is another reality. Through a series of tests, interviews, and orientation courses, the student is detoured from "unrealistic vocational goals." Students are helped to "accept their limitations and strive for success in other worthwhile objectives that are within their grasp." For many students of disadvantaged backgrounds, the "vocational guidance" program is simply another socially structured mechanism for processing them into roles defined by the needs of the technological economy.

As a counter to this kind of vocational "programming" of students, Lane Community College (Oregon) has created a Creative Job Search Technique program of vocational guidance. The program is based on the premise that the individual who depends on others to locate a job for him is unemployed longer than necessary. But the individual who knows himself, has studied the labor market, and has prepared himself for his place there is not dependent on others. Participants find their own jobs--the Creative Job Search Program does not find jobs for them.

Chapter 6 presents a discussion of other aspects of vocational programs in the junior colleges.

Other Student Personnel Services

In addition to the four major guidance and counseling services discussed in the previous section, the counseling staffs of community colleges are often charged with a myriad of other obligations. These run the gamut from establishing disciplinary procedures and overseeing student activities, to providing financial and health services. Although these do not, strictly

speaking, fall within the area of guidance and counseling, the mode of administration of such services on any given campus is influenced greatly by the perspectives and orientations of the counseling staff.

Furgeson (1967) presented the view that a comprehensive program of organized student activities is necessary to implement the goal of general education. Virtually all community colleges have such programs, with varying degrees of student participation. Raines (1965) found that students who respond most readily to such programs are the collegiate-minded students under 21-years old. A report compiled at Harrisburg Community College (Spector, 1970) noted that 20 percent of the student body participated in student activities. Students who planned to transfer were the most active, more male students were active than females, and sophomores were more active than freshmen. Part-time students did not usually participate in student activities. Students whose fathers were college educated were more active than those whose fathers had no college experience.

There is some disagreement, however, about the efficacy of "organized activities" for students as an educational mechanism. Such activities do prepare students for socially responsible roles, and do give students a sense of belonging to the college community, but C'Banion (1971) argued that unless these activities truly engage students in the decision-making of the college they serve more as a palliative than a stimulus. He insisted that students activities should not be limited to "sand-box" student governments; students should be included on the curriculum committee, on the administrative council that makes all major decisions, and on the board of trustees. They should be constantly involved in teacher evaluation; they should have responsibility for helping to relate the college to the community; and they should participate in planning the physical lay-out of the campus and new buildings. In sum, student activities should involve the student in the education of other students. In concrete terms, however, this view is not widespread among the counseling staffs of community colleges.

Recommendations for Further Research

The organization and administration of community college guidance and counseling programs can perhaps best be understood as a philosophical question. A review of the literature suggests that although the Humanist Ethic is successfully challenging the Social Ethic in some quarters, it is by far still a minority position. Consequently, as Sorenson (1968) points out, although students may get some temporary help with an immediate problem, rarely do they acquire any new skills, new concepts, or principles or new coping strategies that they can use in the future.

Evaluation and Research

Evaluation of student personnel programs at the community college level have been sporadic and inconclusive. Indeed, Roueche (1968) concluded that evaluation of these programs is virtually non-existent. Much of what passes for evaluation is simply a series of statements about what "might be" rather than a systematic assessment of "what is." There is little agreement on what standards to use in evaluation.

As an example of the disparity in measures and findings, we will present below a summary of four evaluation studies. The inconclusiveness and incompatibility of findings which characterizes these studies is representative of the literature in general.

Spector and Garneski (1966) reported on a pilot program of group counseling at Phoenix College. Students were divided into experimental and control groups. The control group received no counseling, the experimental group met eleven times to discuss vocational interests, tests, school policy, curricular offerings, registration procedures, and other matters. The experimental group had significantly higher grade point averages; the non-counselled group had an attrition rate three times greater than the experimental group. (There was no significant difference in semester hours earned.) Nelson and Haberer (1966) also found that a required counseling program, in conjunction with the remedial program, produced some modest evidence that counseling had been a contributing factor in the level of academic achievement.

By contrast, Kingsley and Scheller (1966), using grade point average as the only measure, found that there was no significant difference between counseled and non-counseled students. They concluded that short-term forced counseling is not effective in dealing with underachievement problems.

Aughinbaugh (1965) found at American River Community College (California) that when individually-counseled students were compared to group-counseled students, there was no significant difference between the two groups with respect to (1) persistence (non-attrition), (2) academic achievement, and (3) goal motivation.

In contrast to the Aughinbaugh findings, R.M. Clark's (1968) study of the counseling program at Reedley College (California) found that individually-counseled students did indeed demonstrate superior academic achievement as measured by grade point average and attrition. (In both the Aughinbaugh and Clark studies, one of the criterion of "success" of the program was the incidence of attitude change in favor of the counseling process, and the likelihood that students would seek out further counseling services. One question the validity of such a "self-perpetuation" standard as a measure of the success of a counseling program).

The few empirical studies which do exist are not always rigorous or systematic in their methodology. Most studies focus on such empirical measures as attrition rates, grade point averages, and semester hours earned, as the indicators of the relative "success" or "failure" of counseling programs.

Selection of such measures, of course, reflects a specific philosophical bent on the part of the researchers. In contrast, Priest (1959) maintained that success ought to be measured by the growth of individual students, not by the maintenance of inflexible, impersonal standards. There is a need for evaluations which define "success" in qualitative terms. Indices have yet to be devised to measure the more intangible results of counseling, and most researchers seem content to continue using measures which are essentially products of the old mode. Research is the means by which the "questions-that-are-worth-asking" are posed and investigated. There is a mutual, cause-and-effect relationship between counseling and research on counseling: counseling programs spawn evaluative research on such programs, and in turn, the research findings influence the administration of counseling programs. If research does not pose insightful or incisive questions, then there is little impetus for counseling to become manifestly insightful or incisive. Researchers must recognize this responsibility to lead through their research, if there is to be significant improvement in counseling and guidance.

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CHAPTER 10

JUNIOR COLLEGE FACULTY: A NEW BREED IN HIGHER EDUCATION

Ann I. Morey

Faculty as Agents of Change

The explosive demand for change today has had an impact on all social institutions and the implications for education are enormous. Lon Hefferlin (1969) emphasized the need for educational institutions to respond:

...the swift and ever-accelerating changes in the conditions of life at home and abroad will require related innovations in the programs of the institutions whose responsibility it is to prepare each new generation to live and to work amid the rapid ebb and flow of human events [p.xi].

The rapid growth of community colleges can be viewed as a response to some pressing social problems and needs. More than any other segment of higher education, the community college has as part of its charge continuous adaptation in order to be responsive to problems, needs, and changes in its immediate and large community. Yet, higher education as a whole has been peculiarly resistant to change. Rudolph (1962), a historian, noted that, "Experimentation, which was the life of the university, and innovation, which was its gift to society, were seldom tried upon the colleges and universities themselves [pp.492-493]." Similarly, Rourke and Brooks (1966) have observed:

Somehow university personnel, whose lives are devoted to expanding knowledge about the most elusive processes of their environment, nonetheless find it extremely difficult to accept the idea of looking into the campus itself [p.1].

Much of the literature on organizations and their capacity to change is predicated on the background and attitudes of organizational members as persons. People, rather than systems, are viewed as the primary agents of change. Hodgkinson (1967) argued that: "Patterns of social organizations are...created, maintained and altered by human beings who must take the responsibility for them [p.33]." Many observers have called upon college personnel to bear the responsibility for reform and progress (Sanford, 1962; Gross, 1963; Perkins, 1966; Platt, 1966).

Although research in higher education has blossomed during the last decade, little attention has been given to college personnel, particularly faculty members, despite the fact that the need has long been recognized. Nearly fifteen

years ago, Trow (1957) pointed out:

If we are to know anything at all about the nature of an educational system and of what actually goes on within its institutions, we must know something about the men and women who teach within it -- the kinds of people they are, how they are recruited, from what parts of society they come, through what paths they come to teaching, what values and attitudes they hold, and their conceptions of themselves, their roles, their students and material they teach [p.350].

In their critical, sociological analysis of the two-year college, Blocker, Plummer, and Richardson (1965) asserted:

Probably no other problem is causing more delay in the rapid development of the two-year college than the confusion as to the type of faculty member that is needed, the best methods of training and selecting these faculty members and a clear delineation of faculty roles in regard to the functions of the two-year college [p.134].

The faculty determine the effectiveness of an institution. They constitute the professional core of the community college who translate "the philosophy, purposes, objectives, and functions of the institution into meaningful action through teaching, educational guidance and quasi-administrative work on committees." (Blocker et al., 1965, p.137)

The Setting: Challenge and Conditions of Work

The Community college is in a period of unprecedented growth and rapid change. Despite many attempts, it remains ill-defined as an educational institution. Part of the problem stems from the fact that the junior college is an institution with very little tradition (Garrison, 1967). It has borrowed both from the secondary school system and from higher education for its forms and procedures. It has been called an "open door" institution, characterized as a melting pot for vast numbers and various types of students, and identified as a "teaching institution" where research activities have a minor role (Brawer, 1968). It is in this ambiguous and amorphous setting that the community college teacher seeks to function and define his role.

As earlier chapters of this study have indicated, the junior college teacher is faced with a diversity of students uncommon to most institutions of higher education. Chapter 1 pointed to the fact that they have a wider range of abilities, motivations, and interests than the students at the typical four-year college or university. In addition, as Gleazer (1967) remarked: "Many students with whom he (the teacher) works are misdirected or uncertain in career goals; they may require opportunity to repair weak backgrounds; they may frequently respond more readily to the practical than the theoretical [p.148]." Although some community college students are beginning their careers in higher education, most community college students do not have the usual motivations of four-year college students. The community college teacher is faced with students who want to gain skills for immediate employment and with students who have unrealistic notions about their future careers that are unrelated to their abilities (Garrison, 1967). All the authors who have written on this subject agree that given the diversity of its students, teaching in the community college is indeed a challenge.

Problems of Identity and Role: Professional Isolation

As the community college breaks away from its secondary school heritage and seeks identification as part of higher education, the two-year college faculty are increasingly identifying themselves with four-year college and university faculty. However, most community college instructors are unsure of their status in the educational spectrum. They do not fit traditional categories and feel that graduate faculty are arrogant and patronizing towards them (Garrison, 1967). Based on his impression of interviews with approximately 650 teachers at 20 community colleges Garrison asserted that

...the junior college teacher is--or may be becoming--a new breed of instructor in higher education. Markedly different in significant ways from the usual situations of his four-year colleagues are his conditions of instruction, his aims, and his professional-philosophical attitudes toward his task [p.15].

Even though the community college teacher identifies himself as part of higher education, he typically does not feel part of the "community of scholars." He lacks a sense of professionalism and feels isolated. Garrison (1967) believed that faculty members want the opportunities for professional scholarly growth,

but that their colleges generally do not provide the necessary context, resources, and assistance. The varied class schedules and heavy teaching loads do not facilitate interaction among teachers within a department. Moreover, most community colleges do not provide adequate financial support to those instructors who wish to attend professional meetings and workshops or take refresher courses. Arguing for opportunities for professional growth and stimulation, Garrison (1967) wrote:

Yet there is unquestionably an immediate need for junior college teachers to have multiple and effective sources of contact with one another, so that innovations in curriculum and teaching practices, the development and sharing of instructional materials, and the mutual profit and stimulation of discussion, can contribute to their sense of professional unity [p.30].

There appears to be a lack of professional organizations which community college faculty can join. Many professional organizations and academic societies are limited to four-year college and university faculty; others, informally, do not recognize community college faculty as "bona fide" members. There are two national organizations especially for community colleges: the American Association of Junior Colleges which is primarily for institutional membership and the recently formed National Faculty Association of Community and Junior Colleges. It is interesting to note that Kelley and Connolly (1970) pointed out that many community college faculty belong to the National Education Association and/or a state teachers association usually affiliated with NEA. These organizations are identified mostly with elementary and secondary education. More militant faculty associate themselves with the American Federation of Teachers, AFL-CIO.

Conditions of Work

Since the community college differs in many respects from other types of colleges, one would expect that there would be differences in the job responsibilities and professional roles between community college instructors and four-year college and university faculty. Blocker and Wolfe (1965) stressed that the university professor usually teaches courses that have a close relationship to his specialty. In contrast, the community college instructors may teach courses that involve several areas of specialization. The two-year college teacher may be regarded as more of a generalist, teaching courses which are part of a broad area of study (McGee, 1962).

Another important difference between university professors and community college faculty members is related to research. Many university and four-year college professors conduct research and produce publications for professional advancement, status, and economic advantages from royalties and consulting. By and large, faculty members at community colleges are limited by their colleges from participating in these activities. Moreover, while the university professor is expected to publish, community college instructors are usually not required to produce theoretical research (Blocker and Wolfe, 1965). Rainey (1961) asked 58 two-year college presidents and deans to indicate if they used professional writing as a criterion for hiring, promotion, and salary. He reported that 59 percent of the administrators did not use professional writing as a criterion for hiring or promotion while 41 percent did. Moreover, only 21 percent indicated that professional papers had a positive effect on salary.

Teaching loads. The main assignment for community college faculty is teaching. There are several ways to determine the average work load of the faculty. One way is to measure the number of teaching hours per week. Medsker and Tillery (1971) reported that until recently the number of teaching hours ranged between 15 and 18 hours. A slightly lower load is characteristic for those individuals teaching mostly lecture courses, and a slightly higher one for those who have laboratory sessions. Blocker, et al., (1965) cited similar estimates: 12 to 15 lecture hours or 15 to 20 laboratory hours per week. Another way to measure teaching load is to assess the student contact hours per full-time faculty member. This method takes into consideration the number of students under a teacher's jurisdiction and has been advocated by Medsker and Tillery (1971).

Information concerning class loads and class size is important not only because of institutional cost analysis and projections but also because it is helpful in equalizing faculty responsibilities and assignments. More importantly, class loads and class size directly influence the type of education that can be offered. Any attempt to estimate a reasonable teaching load must consider the other activities in which faculty engage. Faculty members are expected to participate in academic advisement, counseling, supervision of student activities, and serve on institutional committees in addition to meeting their classes. They also need time for preparing their courses, to read the literature in their field and for professional refreshment. Based on his interviews with approximately

650 community college faculty, Garrison reported:

With the unvarying insistence of a metronome's tick, faculty pinpointed their most pressing professional problems with one word: Time....There is not enough time, the teachers said over and over, to keep up in my own field; to develop innovations or new methods in my own teaching; to do a proper job with individual students; to investigate what other junior colleges are doing; to study for myself; to discuss educational matters with my fellow-teachers; even, more often than I like to think, to do a decent job of preparation for my classes; to refresh myself, even occasionally, by brief association with some of my colleagues in my own discipline, whether at conventions, special regional meetings, or whatever; to function effectively on faculty committees; to help in advising student organizations [p.32].

There is a need to develop models to measure faculty loads and to develop acceptable guidelines with regard to faculty assignments in different fields of study. These models should incorporate the other responsibilities and activities of community college faculty.

Faculty compensation. Many individuals and agencies have called for improved salaries for two-year teachers (Thornton, 1966; Medsker & Tillery, 1971). They feel that community college teaching positions must be attractive and competitive in order to recruit and retain qualified teachers. The National Education Association survey reported that for 1967-68 salaries for junior college faculty did not compare favorably with salaries of senior institutions beyond the lower faculty levels. It is questionable, however, whether such comparisons are justifiable as the training and experience of four-year college and community college faculty are not the same.

Based on several research studies of the National Education Association, Graybeal (1970) reported that for 1969-70 the median salary being paid to faculty in public two-year institutions (\$10,850) showed an increase of 18.4 percent over the median salary (\$9,165) estimated in a similar study for 1967-68. The median salary increase during the same period for faculty in nonpublic two-year institutions was somewhat less (\$8,190 from \$7,211 or 13.6 percent).

During the last decade, faculty members have demanded improved fringe benefits and have met with some success. King (1971) reported on an American Association of Junior Colleges study published in March, 1971. Comparing the study results with data collected in 1960, she concluded that "...benefit plans have

become a significant part of the total compensation of junior college faculty and staff, and that further improvements and broadened coverage may be expected as plans continue to respond to specific needs [p.10]."

Academic rank and tenure. One of the current debates is whether or not community colleges should adopt faculty rank systems. In 1961, the American Association of University Professors reported that more than 100 community colleges had academic rank systems. Other surveys have shown a steady increase in the number of colleges instituting such systems (Blocker & Wolfe, 1964, Harrington, 1965). The advantages of the rank system are several. It identifies community colleges with higher education, thus further shifting the images of two-year colleges away from secondary schools. Professional rank is a symbol of status and acceptance that can be helpful in attracting and retaining qualified teachers, in maintaining contact with other professionals, and in submitting articles for publication. Moreover, the rank system has the potential to improve faculty morale and recognition. Community college teachers frequently complain that there is not enough opportunity for advancement and recognition in the two-year college. Promotion from one rank to a higher one is an emblem of meritorious service (Blocker, Plummer, & Richardson, 1965; Garrison, 1967; Medsker & Tillery, 1971; Thorton, 1966).

However, the rank system ties the community college more closely to traditional and academic models rather than to an open, flexible, and experimental orientation. In addition, as Tillery (1963) has cautioned:

The status of research and scholarship, the dictum of "publish or perish," and the emphasis on academic standards and curriculum for an intellectual elite are increasingly characteristic of the university and four-year models. However appropriate these demands and values may be for senior and graduate education, they are in conflict with the teaching, guidance, and service functions of the junior college [p.8-9].

Garrison (1967) observed that within the faculty, liberal arts instructors are generally in favor of establishing a system of rank while their colleagues in the vocational and technical fields usually oppose the system. He reported that one instructor stated: "You know, to call myself an associate professor of spot welding is a bit ridiculous [p.68]." Based on his study of differences between faculty members in community colleges with and without academic rank

policies, Hendrix (1965) noted

...the presence or absence of academic rank policies appears...[to affect] the environment (curricular and extracurricular) as it is perceived by students. It should be remembered that it is the environment of which the student is aware that largely determines the way in which he functions in a college [p.28].

Community college personnel should carefully consider the affects of the rank system before instituting it. Many questions remain unanswered. What effect, if any, will faculty rank have on instruction? Will the establishment of academic rank tend to formalize policy making along the lines of senior institutions to the detriment of the objectives of community colleges? In particular, would the environment of the community college be altered in such a way that would hinder the attainment of vocational and technical education objectives? What would happen if only instructors of traditional subject had faculty rank? On what basis would advancement be determined?

Blocker and Wolfe (1964) reported that the policies for promotion of faculty at two-year institutions differed from those at senior colleges and universities. While the latter emphasized research, teaching, and professional service; community colleges placed more emphasis upon professional growth, teaching performance, experience and length of service, and contributions to the development of the college. Salary schedules in public community colleges are based upon education and service.

Who Teaches in the Community College?

Faculty Characteristics

A decade ago, public community college faculty were most often identified as former secondary school teachers. Recent research evidence indicates that this typology is no longer valid. In a 1967 study of 57 institutions, Tillery and Medsker reported that a little less than one-third of the staff members were recruited from the public school system. About 22 percent came directly from graduate school, 11 percent were from four-year colleges, 10 percent from business and industry, and the remainder from various sources (Tillery & Medsker, 1971).

Increasingly, the new faculty are recruited from graduate schools, four-year college faculty, industry, trades, and the professions. These groups comprise almost two-thirds of the faculty on community college campuses. A study of new faculty at 547 junior colleges sponsored by the National Education Association, indicated that in 1963-64 and 1964-65, 30 percent of the new faculty came from secondary schools, 24 percent from graduate schools, 17 percent from four-year colleges, 12 percent from government administration, 11 percent from business and industry, and 4 percent were graduates of bachelor's programs (National Education Association, 1965). Two statewide studies of new faculty further document the wide variety of sources from which junior college faculty are recruited (Eckert & Stecklein, 1959). Of the 1,500 new faculty positions filled between 1965 and 1967 in New York, about 20 percent had been high school teachers while approximately 25 percent came directly from graduate schools. Of the remainder, about 16 percent had been in business industry, less than 10 percent were transferring from positions at other junior colleges, and approximately 15 percent came from four-year colleges. A study of 1,300 new full-time faculty members in California community colleges in 1967 revealed that 36 percent had recently been employed in high schools, 10 percent in other junior colleges, and 15 percent in four-year institutions. Approximately 11 percent came from industry, the remainder came from graduate schools and other areas.

The proportion of faculty that are new to junior colleges is not surprising given the explosive growth of these institutions. Based on data from the national study of 57 institutions Medsker and Tillery (1971), reported that in 1967 over 46 percent of the staff members at these colleges had been employed at that particular college between one and three years. Moreover, 19 percent indicated that they had been at their college for only four to six years.

The data from the 57 colleges also provides some indication of the age of the staff at these institutions. Eighteen percent were between 20-30 years of age; 59 percent between 30 and 50, and 23 percent were over 50. These data are in contrast to those obtained for new faculty in two statewide studies. Kelly and Connolly (1970) reported that for New York state in 1967 almost 50 percent of the new faculty were under 30, and 10 percent between 30-35 years of age. In a 1961 Michigan study, Siehr (1963) indicated that nearly 75 percent of the new faculty were under 30.

Academic credentials. Several studies have sought to identify the academic credentials held by junior college faculty. The two tables below summarize the findings. Table 1 presents data for all faculty members regardless of how many years they have been teaching, while Table 2 presents data for newly hired faculty only. They indicate a marked trend toward a larger percentage of all junior college faculty holding the master's degree. In the 1950's approximately 65-68 percent were awarded this degree compared with about 74-78 percent in the 1960's. However, an increase in the percentage of individuals having the doctorate does not appear to have occurred. The low percentage of Ph.D.'s teaching in the junior college has been viewed by some as desirable (Gleazer, 1968).

Table 2
Academic Preparation of New Faculty in Two-Year Colleges

Year of Study Author	Highest Degree Reported by Percent		
	Doctorate	Master's	Less than Master's
1961 (Siehr)	7	73	20
1964-1965 (Brown)	11	75	14
1965-1967 (Kelly & Connolly) (New York State)	7	68	25

Previous teaching experience. Based on data presented earlier on place of last employment one can estimate that at least 40 percent of the faculty members enter junior colleges with no previous teaching experience. There are, of course, variations among states. Siehr (1963) noted that three out of four new faculty entering the Michigan State System in 1961 had no previous college teach-

Table 1
Academic Preparation of Faculty in Two-Year Colleges

Year of Study (Author)	Highest Degree Reported by Percent				
	Doctorate	Master's plus 30 credits	Master's or 1st Professional	Less than Master's	Less than Bachelor's
1918-1919 McDowel	3	—	39	58	—
1922-1923 Koos	3	—	47	50	—
1953-1954 Colvert, Litton	6	—	68	26	—
1955-1956 Colvert, Baker	7	—	68	25	—
1958-1959 Medsker	10	—	65	25	—
1963 Wattenbarger	12	—	77	11	—
1966 Beazley	6	—	76	18	—
1967 National Science Foundation	9	—	74	17	—
1967 Medsker	9	—	78	10	6
1967-1968 National Education Association	6	23	56	16	—
1969 Anderson, Thornblod and Spencer (Illinois)	4	21	56	13	6
1969-1970 National Education Association	6	28	50	16	—

ing experience. For New York State approximately 20 percent of the new faculty had no prior teaching experiences (Kelly, 1967). In contrast Winter (1969) reported that only nine percent of the newly hired California faculty had no previous teaching experience. Since the junior college is committed to good teaching, the preparation for teaching junior college students is crucial. Yet the proportion of faculty who have little to no teaching experience is over-whelming in light of this commitment. Moreover, it is doubtful if teaching experience in the secondary schools is adequate preparation for teaching at the community college level. In this regard, Gleazer (1968) has stated: "Many junior colleges...are faced with the imperative need to develop orientation programs for faculty; and complex in-service programs for the induction of inexperienced teachers into the skills of instruction and the community-oriented nature of a majority of our institutions [p.7]."

Faculty Attitudes

It is clear from the above discussion that community college faculty are diverse in their personal characteristics, academic preparation, and past job experience. One might expect that their attitudes toward and commitment to the two-year college reflect their past experiences. In this regard, Kelly and Connolly (1970) stated that "...the way an individual approaches his new position depends to a great extent on the style he has adopted through his past experience, and this affects the way he performs his new role and/or his willingness to modify it [p.11]." It seems obvious that there must be some congruence among the values, attitudes, and motivations of staff members and the objectives of a college if the educational program is to succeed. Although some conflict within an organization is necessary to avoid stultification, a high level of conflict endangers the attainment of organizational purposes.

There is some evidence to suggest that community college faculty are not in complete agreement with stated institutional purposes. A 1956 study of 76 two-year colleges asked the staffs the type of institution in which they would prefer to teach if compensation and advancement

were equal (Medsker, 1960). Approximately 50 percent of the staff members surveyed indicated that they would prefer to teach in a four-year college. About 46 percent preferred to teach in junior colleges and two percent selected high school teaching.

In the 57 community college study mentioned earlier (Medsker and Tillery, 1971), only 54 percent of the faculty indicated that they prefer to be employed in a community college while 27 percent would rather be employed at a four-year college and 18 percent at a university. Medsker and Tillery concluded: "...the fact that so many staff members would really prefer to be elsewhere at least raises a question as to the institutional commitment found in the community college [p.91]." In particular, the authors maintained that many community college staff have negative attitudes toward programs and services for non-transfer students. Although very few faculty members view technical and vocational education as inappropriate, varying proportions do perceive certain programs as not essential to the curriculum of their college. For instance, 85 percent of the faculty members thought technical and semi-professional two-year programs were essential whereas only 50 percent responded in the same manner regarding pre-employment curricula for skilled and semi-skilled employment, 34 percent for pre-employment or in-service training for adults, 27 percent for retraining of technologically unemployed adults, and 21 percent for short-term occupational programs. Those faculty indicating they would prefer to be affiliated with a four-year college or university were more likely to oppose occupational and remedial programs. Similar findings on commitment to vocational and technical goals were reported by Montgomery and Schultz (n.d.) in their study of faculty members in Florida junior colleges.

With regard to the relative lack of acceptance of some vocational objectives of community colleges, Medsker and Tillery commented:

There is overriding concern about the preparation of students to transfer, when not more than half of those who declare such intentions ever do so, and about negative attitudes on the part of many staff members toward programs and services for the nontransfer students..... It is imperative that each community college develop an enthusiasm for a new mission. If the colleges fail to do this, it is probable that other types of non-baccalaureate institutions will be established to perform some of the services which they are presumed to render, but on which they will have defaulted [p.147].

(The topic of vocation education is discussed in Chapter 6.)

Further evidence of the failure of many faculty to espouse the purposes and functions of community colleges was presented by Melone (1970). He reported that only six percent of the faculty agreed with the statement that the main emphasis in junior colleges should be on vocational education. The data also indicated that 54 percent of the faculty thought any high school graduate should be able to attend junior colleges.

A few studies have examined differences among groups in their acceptance of community college objectives. Lipscomb (1965) sought to determine the personal and educational experiences of Mississippi public junior college faculty that differentiated between individuals with high and low acceptance of the stated role of the Mississippi junior colleges. The high acceptance group tended to be below 45 years of age, were likely to have had some formal courses designed for junior college teaching, and participated in junior college in-service programs. They tended to spend more hours at their jobs than low acceptance groups and were more satisfied with their work. The low acceptance group was older and primarily male, had no formal courses designed for junior college teaching, and participated little in in-service programs. These differences between groups were based on percentages reflecting differences in responses to the items in the questionnaire.

Fitzgerald (1967) and Medsker (1960) both found differences in opinions on the purposes of their junior colleges between teachers in transfer education and teachers in technical/vocational education. Both groups attached greater importance to their own areas than did the other group.

A study at San Jose Junior College (Clark, 1960) showed disagreement concerning institutional purposes among administrators, "academic" faculty, and

"applied" faculty. For instance, 70 percent of the administrators, 30 percent of the applied faculty, and only nine percent of the academic faculty agreed with the statement that the main emphasis in the junior college should be on vocational education. Administrators (100 percent) and applied teachers (68 percent) favored the community having a considerable voice in determining the curriculum of the junior college. A majority of academic teachers (56 percent) did not agree.

Several surveys have been undertaken to identify faculty and administrative perceptions of major problems confronting community colleges in the state of Washington in order to ascertain: (1) what community college teachers considered their most important instructional problems and (2) whether or not administrators perceived the problems of teachers well enough. In general, there was a high degree of agreement among the groups on the choice of most serious problems. Problems that were considered serious are having suitable office space, stimulating students to seek answers on their own, becoming familiar with requirements of related courses in senior institutions, finding time to study in other fields while preparing oneself to teach his own specialty, adapting instruction to individual differences, constructing tests which measure depth of understanding, and sharing rooms and equipment. There was a lack of agreement regarding the seriousness of the problems pertaining to relations with administrators and relations with other teachers and teacher organizations. Niland (1964) surveyed faculty and administrators in California public junior colleges in order to identify and classify the areas of conflict between these two groups. The central issue that emerged was the teacher's feeling that the administrators' monopolization of policy making violated his right as an expert to be consulted in decisions that affected his conditions of work. A desire on the part of the faculty for a greater role in decision making and policy formation was also reported by Brennan (1969) in his study of faculty, administrators, and governing board members in San Diego County and by Fitzgerald (1964) in his study of California public junior college faculty.

Based on interviews with over 650 staff members, Garrison (1967) concurred with this view and extended it:

Indeed, if an overall impression (or even conclusion) may be derived from this study, it is that the chief issue affecting the junior college teachers is the administrative

context in which he works. . . . the faculty member is saying that, in relation to himself, administration is tradition-bound, confused in its aims, unimaginative, and too typically inflexible [p.24].

Garrison maintained that community college faculty want to be heard, especially on matters affecting them as professionals, and that unless they feel they can meaningfully participate they will surely organize, even unionize, locally, statewide and, perhaps, nationally. Olson (1968) found that administrators in four community colleges did not favor increased faculty participation in governance. If Olson's conclusions are generalizable, then Garrison's prediction seems accurate.

A few studies have examined faculty perceptions of the role of key college administrators. Since it is reasonable to assume that the effective functioning of an institution is related to the behavior of its members and that behavior is to some extent based on expectations and perceptions of the system, it seems important to assess faculty perceptions of administrative roles. Verbeke (1966) found that the faculty had different perceptions of the perceived (actual or expected) behavior of academic deans than did community college presidents. A study by DeLoache (1966) found that faculty members and college presidents in Oklahoma community colleges generally assess the various aspects of the president's role differently. Upton (1971) reported similar results in his study of board of trustee members and faculty at 20 colleges. The two groups differed in their expectations of 14 of 31 types of performance by the president. Most of these differences dealt with the president's relationship with faculty. Differences between trustee and faculty expectations were found to be related to the size of the institution, faculty confidence in the leadership of the organization, and intergroup differences in expectations for division of responsibilities.

Based on the results of a multiple linear regression analysis, Taylor (1967) found that administrative policies and practices constituted the most important environmental factor affecting faculty job satisfaction in 14 community colleges in Texas. He reported that morale at two-year colleges generally was not high. Blocker and Richardson (1964) surveyed faculty at six community colleges to ascertain causes of low morale. Although wide variations among colleges existed, morale was consistently low with regard to lack of opportunities for professional advancement, poor salary, heavy work loads, poor working

environment, and relations with students. Blocker (1965) later commented that some faculty members are unhappy with student capabilities. Their lack of understanding of and rapport with their students suggests, once again, that many instructors do not accept the egalitarian function of the community college.

In terms of happiness with the job, Williams (1969) concluded that academic teachers were less satisfied than were vocational teachers. This finding is consistent with the view that many community college academic faculty would prefer to teach four-year college and university students (Garrison, 1967; Medsker, 1960; Medsker & Tillery, 1971). Another study on morale revealed that women faculty had higher morale than their male counterparts. Young married males were less satisfied than any other group with their salaries (Richardson, 1962).

The Preparation of Community College Teachers

As has been suggested earlier, one of the critical problems facing community colleges is the preparation of teachers. The problem involves the level of faculty interest and commitment to the role of the community college and their ability to teach community college students. Medsker and Tillery (1971) emphasized that community staff must have the interest and background to relate meaningfully to the "new" students in higher education, a commitment to the education of students from low income homes and below the median academic aptitude, and a strong orientation to the special situations involved in working with minority students.

Most community college instructors have received degrees in academic subjects with little or no study related to community college teaching. Koos (1950) reported that less than a tenth of all the junior college teachers he surveyed had taken college courses dealing specifically with junior college teaching. This finding is not surprising since in 1954, only 23 colleges and universities offered such courses (Colvert & Baker, 1955).

Cooper (1964) noted that the major obstacle to the development of programs designed to prepare community college teachers is the lack of assigned responsibility for the task. Cohen and Brawer (1968) observed that where such programs have existed, the programs are similar to those used to prepare elementary and secondary teachers. Moreover, they stated, "The junior college course or program is still viewed largely as an adjunct to the main concerns of a teacher's

preparation [p.11].

The fact that public community colleges were often considered an extension of the secondary school system meant that state departments issued credentials based upon completion of a certain amount of professional training. As public community colleges have become more independent, credential requirements have been eliminated or replaced by credentials based on subject-matter preparation (Medsker & Tillery, 1971).

Community college administrators recently advocated arresting the current trend away from prior teacher training as a prerequisite for community college teaching (American Association of Junior Colleges, 1969). They called for training in the areas of curriculum and learning and for special programs designed to prepare occupational instructors and remedial teachers.

In 1967, more than 200 institutions indicated they were interested in preparing college teachers. Many of these wanted to offer programs specifically organized for the preparation of community college instructors (American Association of Junior Colleges, 1967). Garrison (1967) emphasized the need to establish communication with graduate faculties so that mutual education on needs, resources, and common interests can occur. For example, graduate faculties need to be better informed of the opportunities for their students in lower-level college teaching and the implications of this for non-research oriented graduate training. Moore (1970) regretfully noted that few institutions offer training for community college teaching and none have indicated training designed to assist faculty work with the educationally handicapped.

There appears to be some ambivalence among community college personnel over the extent to which they should rely on the "research-oriented" university for the training of their staff (Singer, 1968; E. Cohen, 1970). Kiernan (1967) voiced the opinion of many junior college people that they should not count on the four-year colleges and universities to train teachers for two-year colleges because experiences show that the universities tend to do this in isolation from the realities of two-year college needs and circumstances.

One Program for All?

Traditionally, elementary and secondary school teachers have been required to complete courses in pedagogical theory and practice. College teachers have not been required to have any credential other than a graduate degree in an aca-

demic discipline. Even if one advocates more pedagogical preparation for college teaching, the preparation of community college teachers should be different from that of four-year college faculty due to the different emphasis placed on research and teaching as well as the different student population and institutional goals.

The diverse goals of community colleges, the individuality of institutions, and the variety of individuals who seek to teach in the community college militate against any single model for the preparation of teachers (American Association of Junior Colleges, 1969a). Moreover, as Cohen and Brawer (1968) pointed out, even a single program does not exist in isolation:

Rather, it exerts influence on, and is influenced by, societal contexts--Those of the university in which it is housed, of the schools it serves, of the people it attempts to shape, and of the theories current in its disciplines. [p.49]

Gleazer (in American Association of Junior College, 1969b) posed the question in another way: "Is there a junior college teacher in a sense that a generalized concept of preparation is useful? Or is this an institution of many tasks for which many patterns of preparation are required? [p.10]"

Medsker and Tillery (1971) suggested that particular elements necessary in the preparation of community college faculty might include

...the history of the two-year college and its place in American higher education; modern learning theory, including the use and limits of educational evaluation, testing, and measurements; the characteristics and values of the diverse student population at today's junior colleges; an opportunity for supervised teaching or internship at a two-year college; a knowledge of modern media and new techniques of instruction [p.99].

Several programs have been suggested ranging from a master's degree in a subject matter field plus an additional year focusing on community college teaching to training institutes established by community colleges themselves. Several models are briefly outlined in the American Association of Junior Colleges publication "Preparing Two-Year College Teachers for the '70's" (1969b). These models are more concerned with structure than content. In addition, several academic disciplinary associations have sought to assess the preparation of

teachers in their fields and/or to recommend specialized training programs, for example, the Advisory Council on College Chemistry (Mooney & Brasted, 1969).

Types of Training

Internships. The distinction made between student-teaching and internships is that the intern is paid by the school in which he teaches and is considered a member of the faculty. Cohen and Brawer (1968), supporters of internship programs, made the following differentiation: "The intern is actually a teacher with a foot still in the university, whereas the student teacher is more like a graduate student with a foot in the schoolroom [p.15]." The internship approach is also advocated by Garrison (1967) who suggested that the potential community college instructor have at least one quarter or semester of actual teaching responsibility. Pyle (1968) emphasized the need for inter-institutional internship programs and a greater emphasis on teacher preparation in doctoral programs.

Orientation Programs. Kelly and Connolly (1970) gave three reasons supporting orientation programs for incoming community college teachers. They compensate for disparate background of new faculty, introduce new members to the locally prescribed mission of community college, and serve to bend diverse individuals into a more cohesive social unit. Richards (1964) examined orientation programs in 23 California public colleges. He conducted interviews with 251 new faculty and 124 administrators in order to identify those critical incidents which either contributed to or interfered with the orientation. Informal, personal assistance often contributed to smooth entry whereas formal orientation meetings, particularly long and untimely ones, interfered with the entry process. New faculty also reported negative reactions to criticisms by senior colleagues when they were not made in private. Tracy (1961) asked new faculty what types of information they needed. Many responded that they wanted basic information, such as the objectives of their college, department, and courses. Studies by Stripling (1964) and Siehr (1963) left little doubt that new faculty members experience many difficulties that perhaps could be eased through better orientation and in-service training programs.

Recently, a study of orientation programs was conducted by Kelly and Connolly (1970). Although only 485 of the 993 colleges who were contacted responded to the survey, the data are the most comprehensive and revealing to date. That 86 percent of the respondents stated their college had a planned

orientation program testifies to the growing awareness of the need for such programs. However, inspection of the data reveals many needed improvements. At 43 percent of the institutions, faculty did not participate in the planning of the program. At 51 percent of the colleges, incumbent faculty were not involved in conducting the sessions. Consultants were used at 46 percent of the orientation programs. Students were noticeably absent as participants.

Although two-thirds of the college orientation programs were evaluated, administrative committees usually assessed the programs rather than new faculty. It is quite obvious from these findings that many programs need to be revised and that models for orientation programs need to be developed. One possible model was presented by Kelly and Connolly (1970).

In-service training. When the presidents of 288 community colleges were asked for their opinions of the needs for in-service staff training, frequent responses included more training in the areas of general education, curriculum and learning; improved training in the academic and occupational fields; and increased responsiveness to current needs and concerns of society and students - remedial and minority guidance programs, processing and modern engineering technology (American Association of Junior Colleges, 1969a). Samlin (1967) surveyed recent in-service education practices at 403 public community colleges. He found that in-service education programs were not numerous. This may be attributed in part to the lack of budgeted funds for such activities. He also reported that few colleges provide faculty release time for in-service programs either during the academic year or the summer. Moreover, there was a lack of agreement regarding the nature of in-service training and the actual practices reported by the institutions.

Morrison (1969) conducted a study of faculty at nine Florida public junior colleges. His data seemed to indicate that both formal and informal in-service programs are successful in socializing faculty into community colleges.

Professional refreshment and upgrading. Garrison (1967) reported that many faculty were keenly aware of their need for professional upgrading and refreshment. The problem appears particularly acute for liberal arts teachers. Part of the problem stems from the geographic location of the college, time, money, the lack of adequate sabbatical leave programs, and the haphazard nature of many existing in-service programs. Garrison suggested that graduate courses

need to be designed to assist community college faculty with the problems and materials of lower division instruction and that new and possibly unorthodox materials and methods need to be developed. Moreover, he suggested working with university personnel on problems of all kinds, providing opportunities for faculties from various colleges to meet, holding brief institutes and seminars, and encouraging and facilitating attendance at professional meetings. In support of his view that professional improvement is a priority problem for community colleges, Garrison (1967) wrote

Though they generally agree philosophically and practically with the "open-door policy," many faculty have an almost foreboding sense that this policy and the national determination for education for "everyone who wants it after high school" may, unless large-scale provisions can be made for helping faculty, inexorably milk dry the major resource of their colleges: namely, the intellectual capital of its teachers [p.43].

The Evaluation of Faculty Performance

Up to this point, the review of literature on faculty has been limited to research and essays focusing on two-year college faculty. It is difficult, however, to even briefly review the literature on evaluation of teacher effectiveness and remain within this narrow focus. Hundreds of investigations have dealt with methods for evaluating teacher performance, the prediction of teacher effectiveness, and the use of various rating techniques in improving instruction (Cohen & Brawer, 1969). Many of the findings and problems concerning the evaluation of teachers are applicable to several levels of education. Moreover, despite the great amount of research activity in this area, relatively little research has been done in evaluating community college faculty performance. Given these considerations, this section shall attempt only to highlight the major findings and issues concerning teacher evaluation and draw upon research done not only on community college faculty but also on instructors generally.

Evaluation of instruction has a history almost as old as our public school system. It has stemmed from a concern to assure the public of quality instruction and has been used to determine merit rating and retention of teachers. Most of these evaluations have been inspectorial--done by supervisors, principals,

and master teachers. The fact that two surveys of evaluation practices in higher education found that two-year colleges relied more on class visitations by supervisory personnel, such as deans and department heads, than did four-year institutions reflects the historical ties of junior colleges with secondary school systems (Astin & Lee, 1966; Gustad, 1960).

Based on responses from 584 colleges and universities, Gustad remarked: "In general, to call what is typically collected or adduced to support evaluative decisions, 'evidence' is to stretch the meaning of that honored word beyond reason." Astin and Lee also questioned the relevance of most measures of teacher effectiveness reported in use at 1,110 institutions, since relatively few colleges and universities evaluated teachers in terms of their impact on students. Supervisor ratings by deans or department chairmen were the most frequent means of assessment. Universities and four-year colleges relied on evidence of scholarly research and publication whereas two-year colleges rarely used this criteria. Grade-mark distributions, follow-ups of students, and classroom visits were more often used at two-year colleges. Only 20 percent of the institutions used student opinions.

Evaluation of instructors has been criticized for being inconsistent, for its use of invalid measures, for being unrelated to apparent purposes. Indeed, a review of some recent practices in two-year colleges does little to refute these charges. Fitch (1965) surveyed evaluation practices in 23 California junior colleges. The major practices included classroom visits, student ratings, and committee consultations with deans, division chairmen, and colleagues. The criteria used to evaluate instructors included classroom management skills, speaking ability, relative subject matter, types of tests, mannerisms, and general "attitude". Fitch concluded that although these procedures were aimed at improving instruction, no clear relationship was evident between these procedures and the desired results.

These surveys document that many attempts have been made to evaluate faculty. There is wide variance to the form of these evaluations, the role that teaching effectiveness plays, and the use and acceptance of the findings. Cohen and Brawer (1969) wrote:

Acceptance or rejection of the methods is often related to the degree of acceptance or rejection of the purposes of instructor evaluation. And purposes for conducting studies vary as much as do techniques for gathering data [p.viii].

It is generally agreed that the main purpose for the evaluation of teaching performance should be to improve instruction. In actual practice, however, the reasons for evaluating community college teachers are nebulous, and there is little relationship between evaluation and the improvement of instruction (Cohen & Brawer, 1969).

There are two main problems with regard to evaluating teaching performance: (1) the definition of appropriate criteria for assessing teacher effectiveness; (2) the development of instrumentation to measure progress toward the attainment of criteria. Most educators would agree that the criteria must be established with regard to the purposes of teaching--the extent of student learning.

Approaches to Teacher Evaluation

The following sections will briefly discuss the main approaches to teacher evaluation, emphasizing student ratings. Ort (1964) contended that the best predictor of success of new teachers was rating by a supervisor. Although colleague and supervisor ratings of faculty have been the most frequently used method for evaluating teaching, there is very little evidence to support the validity of this method. In fact, research has indicated that student ratings are more reliable than faculty peer ratings which appear to be more related to how well a member fits into his department setting than his classroom performance.

Interest in the use of student evaluations of teachers has increased sharply in the last few years (McKeachie, 1969; Cohen & Brawer, 1969). Most faculty members recognize that student ratings may be helpful in improving instruction even though they may be regarded as a threat by some (McKeachie, 1969). In fact, a study at St. John's River College revealed that student ratings were taken seriously by faculty who received low ratings, and appeared to have stimulated self-improvement (Overturf & Price, 1966).

Student evaluations may serve other purposes. For instance, McKeachie (1969) noted that one of the goals of using student rating scales is "to improve student morale and stimulate student thinking about their educational objectives and learning [p.440] Eble (1970) asserted that student ratings provide a means of student participation and stimulate consideration of an institution's general goals and values.

Many articles have argued for or against the use of student ratings.

McInnis (1966), for instance, argued that the influence of students as raters could not be ignored. However, in his review of the literature on course and/or teacher evaluations by students, he noted there was no evidence concerning the accuracy of student ratings and suggested they should be compared with ratings of experts. Halstead (1970) argued that most research on student evaluation of courses and instructors has not examined the possibility that students may not be capable raters or know what constitutes effective instruction. Moreover, he pointed out that several models of instruction involve fundamentally different views. To use a single evaluation scale for several courses and instructors can be inappropriate.

Although research has been scattered, several of the issues may be resolved. It appears as if student ratings are fairly consistent over time. One study showed that student ratings of instructors made while in college correlated well (.40 to .68) with ratings of the same instructors made by the students ten years after graduation (Drucker & Remmers, 1951). Guthrie and Claude (1956) also maintained that ratings by students are stable and reliable.

Student ratings seem to have some validity. McKeachie (1967) correlated students' and trained observers' ratings. The correlations were high on some dimensions but not on others. Nevertheless, McKeachie thought that students can rate teachers accurately. Several studies have shown that students give higher ratings to those teachers from whom they have learned the most (Elliot, 1950; Russell, 1951).

Some studies have focused on the factors that influence students in their ratings. They have explored whether ratings are influenced by their attitudes about instructors, their perceptions of the over-all quality of the college, their course performance, and their cognitive and personality characteristics. Rees (1969) sought to determine the personality and sociological variables related to various ways of viewing college teachers. Eleven types of teachers from seven academic areas were each rated by the same 65 students using 20 semantic differential scales. Personal data were obtained from the students, mainly through the use of standardized instruments. Using a factor-analytic technique, Rees identified seven factors which he correlated with student personality and sociological variables. The results indicated that the way students view teachers is influenced, in part, by the personality traits and background experiences of

the students. Several other studies have pointed to a relationship between ratings and student characteristics (e.g., Carter, 1968; Langen, 1966). Some demographic characteristics may not affect student rating of instructors. Several studies have shown that age, sex, and year in undergraduate college do not influence ratings (e.g., Remmers, 1949; Rayder, 1968). Rayder concluded that neither a student's major area, grade point average, nor grade previously earned from the instructor influenced ratings. Overturf (1966) reported that instructors tending to award higher marks did not receive higher ratings by students. He did, however, report that honor students tend to rate instructors who received low ratings lower and instructors who received high ratings higher than the general student body.

Some research has indicated that student ratings are related to selected characteristics of faculty members. For community college faculty, higher ratings are generally given to faculty coming directly from graduate school than instructors from any other source. Faculty who have taught in high schools generally receive the next highest rank (Overturf, 1966). Associate professors usually receive the highest ratings (Elliot, 1950). Rayder (1968) reported that teachers with less faculty rank and fewer years of teaching experience were rated more friendly, understanding, systematic, responsible, businesslike, stimulating, imaginative, and enthusiastic.

Given the limitations and strengths of the several methods of teacher evaluation, it would appear that a variety of methods would provide a better basis for evaluation. There are many methods which a community college could use to evaluate teaching effectiveness. As indicated in this review, no single measure can be recommended at this time. What does seem crucial is the manner in which evaluations of teacher performance are made. Faculty support of efforts to evaluate them, their acceptance of evaluative results, and their growth as teachers will depend on the climate and policies of the college.

Conclusion

The faculty greatly determine the effectiveness of an institution. They constitute the professional core of the community college, those who translate the purposes of the institution. Perhaps no problems hinder the attainment of institutional objectives more than the confusion as to the type and preparation

of the person needed to teach, a clear understanding of faculty role, and the evaluation of teaching performance.

The literature on community college faculty has begun to describe certain characteristics of that faculty such as origins and attitudes toward the purposes of two-year colleges, and to focus on the identification of major problems. Research in this area, however, is still in its infancy. Most of the research is descriptive and lacks sophistication. For instance, data to identify the background characteristics of community college faculty are limited even for descriptive purposes. Moreover, comparisons among the data from various studies is extremely difficult because categories differ and data are usually not presented in sufficient detail to enable a reviewer to regroup them. The data on faculty background characteristics also need to be categorized by the type of curricula in which faculty are involved, such as baccalaureate programs, occupational and vocational programs, and adult education. Such information could be used not only for descriptive purposes but also to assess the interaction of background characteristics with faculty attitudes, mobility, career aspirations, institutional-professional identification, and teaching styles.

The implications of the studies are not always reported, or at least not clearly stated. Moreover, many researchers seem to lack an awareness of how to translate their findings in a way that will have educational impact. Explicit statements regarding the relevance of the research to present policies and practices are needed. Only a few studies have directly helped in institutional planning.

There is a need for more careful planning of research. Measures are often not validated and their reliability is left undetermined. Studies aimed at overcoming certain methodological difficulties should be undertaken. For instance, more research could be directed toward developing instrumentation and procedures for the evaluation of teaching effectiveness.

More studies could be directed toward examining differences and similarities among institutions. Medsker (1960) documented differences among faculty at different types of two-year colleges as well as similarities among certain groups of instructors across institutions. Information of this sort aids in the establishment of generalizations and the development of strategies for in-

formed planning and change.

There are many areas where research efforts should be focused. The major question is what critical combination of faculty, students, and institutional characteristics lead to certain outcomes? To answer this, systematic research is needed on faculty and their interaction with their environment and students.

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CHAPTER 11

ADMINISTRATION: DEFINING ROLES AND RESPONSIBILITIES

Patrick Breslin

Introduction

A period of rapid growth always draws attention to the problems of change. Change of course is an ever-present process, but its effects are not always readily apparent. Rapid growth is one of its more obvious manifestations and accordingly attracts attention. This is part of what is happening in junior colleges in the United States at present. Growth and change in an institution naturally elicit attempts to understand and guide those processes, and such is the case in junior colleges. An obvious area of concern to those interested in such understanding and guidance is the administration of the junior colleges. Ideally, one would hope to discover the nature of administration at present, the problems and challenges with which administrators must deal, and the responses, innovative or other, with which those challenges are being met.

Tillery (1970) has suggested that little is known about the processes of change in the organization of junior colleges, this is despite the fact that "at least 40 percent of the public two-year colleges in the United States expect to change the manner in which they organize their instructional programs [p. 3]." But institutional change is not solely a response to external stimuli. Change also comes from within. Blau (1955) argued that

...bureaucratic structures continually create conditions that modify these structures. In the study of larger social systems, it is now generally acknowledged that processes of social development must be taken into account, but bureaucracy is still too often regarded as a rigid equilibrium exempt from these processes. It, as well as other social structures, however, contains the seeds, not necessarily of its own destruction, but of its own transformation [p. 6].

Thus, a concern with change in the administration of an institution must deal with the sources and patterns of internally caused change as well as external sources. To gain an understanding of these processes and their impact on junior colleges, this chapter attempts to critically evaluate the research and literature on junior college administration in the United States with a view toward summarizing the present state of knowledge and suggesting some directions of future research.

One of the more striking defects of research on administrative structure and organization in junior colleges is the general failure to approach analysis and description within specified theoretical modes. (The framework of Blocker, Plummer, and Richardson, 1965 discussed later is an exception). What might be described as a "case-study problem approach" has been the most frequently employed strategy. Although such studies may yield intrinsically important information, whatever hypotheses or research questions were tested usually do not permit rigorous and replicable testing within differentiated contexts. As a result, generalizations are strictly limited to peculiarities of the specific institution studied and are therefore severely limited as contributions to understanding and explaining comparable administrative organizational phenomena in the junior college. In order to move from this "scattergun empiricism" to the systematic development of applicable theoretical principles which will guide and order empirical research, this review suggests greater adherence to available theoretical models and the requisite use of comparative methodology.

The social science disciplines have generated abundant theoretical work in such areas as bureaucratic structure and process, the dynamics and etiology of organizational change, bureaucracy and personality, differential styles of authority and leadership, and the structure and function of informal organization; all of which has guided empirical inquiry for over three decades. A cursory glance at the literature on junior college administration and organization reveals an almost total absence of reference to this body of knowledge. This is especially disheartening since many of the administrative organizational problems currently confronting the community college movement have at least a beginning basis of explanation within several available theoretical modes. These current problems include effective incorporation of more student and faculty participation in decision-making, effects of community milieu on a college's administrative process and organizational objectives, differential perceptions of administrative style and uses of power by faculty against the administrators themselves, and the qualities of leadership increasingly required to operate within organizational situations characterized on the one hand by a demanding board of trustees and on the other hand by staff and students no longer willing to accept authority by fiat. Some theoretical suggestions will be offered later.

Turning to the literature on junior college administration as it exists. The central concerns tend to fall into the following categories:

1. types of organization and control
2. boards of control
3. junior college presidents
4. faculty participation in decision-making.

The distribution of literature over these categories is rather uneven, reflecting perhaps the amount of attention or concern connected with particular problems in administration. For example, a very substantial part of the literature surveyed deals with the question of faculty participation in decision-making, suggesting the increasing salience of this issue over the last few years. Similarly, the spate of articles on the recruitment of junior college presidents has accompanied the rapid growth of junior colleges which fueled a nation-wide talent search for top administrators. Conversely, in a period of intense concern with changing roles and new institutions, there has been relatively little attention to more informal processes of organization. It seems clear from the literature that the chief concern is definition of roles and responsibilities, establishing the boundaries of administrative action by various groups.

Types of Organization and Control

Most of the literature on this aspect of administration is concerned with the impact of change on the organization of the junior college. It attempts to respond to the pressures of rapid growth, to seek ways to maintain or improve efficiency in the face of growing student bodies, rising costs, and an increase in multi-campus districts. The basic problem with which the literature is concerned is the choice of the most favorable type of organization. Thus, it deals with various patterns of organization and expansion, describing them and arguing their respective merits and the problems and possibilities inherent in them.

An important aspect of administrative structure which has been treated at length in the literature concerns the organization of the expansion of the junior college. This literature tends to be descriptive rather than analytic. For example, Cox(1966) described three types of structure: the multi-

college, the multi-branch, and the multiprogram junior college. Multi-college systems, as in Los Angeles, contain individual, comprehensive campuses, each with its own administration. The multi-branch system, found for example in San Diego, also has comprehensive campuses but greater centralized control. The multi-program concept involves different programs on different campuses. Jones (1968) attempted a more systematic survey of the same area. He distinguished basically the same types of organization as did Cox but he was more interested in identifying the common problems of multi-unit organization. He concluded that most of the problems of a single college exist at each branch of a multi-unit system; but that the multi-unit system has additional special problems arising from the organizational structure. Chief among these is the problem of fostering autonomy among the units while maintaining enough control for purposes of efficiency. Another problem involves the encouragement of cooperation and coordination among the units and the elimination of jealousy, buck-passing, and paternalistic attitudes at older branches which threaten to stifle creativity at new branches.

Jones argued that more work on this area is needed because of the ever-increasing trend toward multi-unit systems in both urban and rural areas. Part of the reason for this trend, he pointed out, is the promise of increased efficiency and economy; but that promise can only be realized through planning based on well-grounded knowledge of the best alternatives. As Jones concluded, the trend toward multi-unit organization contains the potential for economy and efficiency, or for chaos and confusion.

Some writers have focused on the advantages rather than the draw-backs in the expansion of junior colleges from their original campus. Such advantages as the coordination of curriculum to avoid duplication, more efficient administrative services using computers, and savings in purchases of supplies and equipment have been frequently cited, but there is little documentation on such claims.

One interesting suggestion was made by Zion (1967) in an article pointing to the opportunity for experimentation in a multi-college district. Specifically, Zion proposed the designation of one college as an experimental college in which innovations which might be disruptive to operating institutions could be examined. He further suggested that the faculty at such an experimental college be recruited from the other colleges in the system on the basis of creative ideas for experiments,

or on expressed interest in already scheduled experiments. The students might be recruited on a somewhat similar basis. Length of stay at the experimental college would be limited; thereby insuring that faculty, students, and successful programs would be fed back into the other colleges in the system. While the proposal is quite interesting, it lacked any review or evaluation of other attempts to structure innovation in junior college districts.

In addition to the attention given to expansion, much of the literature on the organization and control of junior colleges deals, again on a generally descriptive level, with the various patterns that organization and control may take. Among the possibilities discussed are junior colleges under the governance of independent boards, junior colleges under local boards of education which are also responsible for secondary and elementary schools, and junior colleges which are branches of universities.

The merits and drawbacks of these various systems of governance have been discussed in countless articles. There is quite general agreement that the arrangement whereby junior colleges are included in a unified school district, governed by a board which also deals with elementary and secondary schools, is the most undesirable. Dewitt and Hall (1965) pointed to several disadvantages of this type of pattern: funds intended for the junior college may be diverted to lower education; the attention and concern of the board members is divided among quite different levels of education; district administrators tend to identify with the secondary level in personnel practices and curriculum policies. (While these charges may be quite valid, the authors provided no empirical evidence in support.) Dewitt and Hall concluded that the junior college cannot fulfill a higher education role while governed by districts primarily concerned with lower education. In this they reflect the feelings and views of many junior college administrators who want separate boards at both local and state levels because their needs and problems are unique and because they feel separate boards can more effectively influence legislators and solicit support from state and federal agencies.

In addition to the concern expressed in the literature with the types of boards of control, a substantial body of material focuses on the relationships between boards and other segments of the junior college. This literature will be discussed in the following section.

Boards of Control

In part because of the pressures of change which have recently affected education, the literature dealing with the boards of control is generally interested in one basic problem--defining the boundaries of areas of responsibility of the boards vis a vis either the administration or the faculty. Much of the literature is content to argue that boundaries must be clearly drawn, or that the faculty should be involved to a greater extent in decision-making.

Various writers have decried the tendency for community college boards to move into administrative functions, for example. But few provide any documentation or analysis of the types of situations where this seems prevalent. The charge appears too broad, insuring that the proposed solution will also be broad (i.e., let faculty participate) without specifying how the solution might actually be operationalized. Another rather typical tack taken by literature on this subject is to spell out carefully the "proper" or "appropriate" role of the governing board: a formal, legalistic approach which begs the question whether boards actually operate in such a way.

The problem of defining areas of responsibility concerning the boards of control has been the subject of several conferences, reports of which comprise a substantial part of the literature. Generally, there has been little attempt to follow up on these conferences, or even to measure in some impressionistic way their usefulness.

Other approaches to the problem have taken the form of descriptions of various types of boards. A few studies have actually used empirical techniques to collect and analyze data on the composition and membership of boards of control. A study by Sapper (1966) is an example of the latter approach. Sapper profiled a "typical trustee" of the California junior colleges and found him to be a white, married (with 2 children), Protestant, Republican male between 40 and 60 years of age, holding a baccalaureate degree, active in voluntary associations, and earning between \$15,000 and \$20,000 a year in a professional or managerial career. Only 14 percent of the trustees were women; less than 2 percent were non-white.

Sapper then studied the attitudes of these trustees towards current problems in the junior colleges. He found that on those problems arising from rapidly increasing enrollments, trustees by large majorities favored increasing enrollment (92 percent favored the "open door" policy) with no tuition charges (74 percent favored continuing the no tuition policy). There was also substantial support for increasing centralization of administration and for increasing service for the non-transfer student.

Sapper also found that 55 percent of the trustees were satisfied with the current status of the junior colleges and did not desire to change the college's present program. Those who did desire change generally saw it in terms of "rounding out" or "completing the balance" of the present program.

The attitudes of trustees toward problems which Sapper identified as developing primarily from "educational restlessness" demonstrate some of the sources of tension over areas of responsibility between trustees and administrators. While 50 percent of the trustees generally favored handling such problems through a report by the chief administrative office recommending board action, from 13 percent to 25 percent favor a committee of board members making a study and recommendations. Such a procedure obviously raises questions of lines of authority between trustees and administrators.

Many of the concerns about current problems in junior colleges which have led to study of the boards of control have also directed attention to the administrative officers of the college. Chief among these, of course, is the president. In the following section, the quite extensive literature on the junior college president will be reviewed.

The Junior College President

The main concern of much of the literature on the junior college president is with the changing nature of the job, and therefore with the changing demands on the incumbent. A related aspect is the quantitative change in junior colleges, leading to a rapidly increasing need for executives to fill leadership posts. Because of these concerns, much of the literature in this area is

normative in character. It attempts to describe what the role and function of the president of a junior college should be and to enumerate the qualities of the ideal president.

In large part as a response to the rapidly growing need for executives, many articles have dealt with the process and problems of recruitment. Several articles surveyed current presidents to discover trends in recruitment. Roberts and Schultz (1964) found a trend toward increasing education among presidents, but only 44 percent of their sample had doctorates, two-thirds of which were in education. They also saw a trend toward increasing recruitment of presidents from senior colleges and universities and away from elementary and secondary education. Other administrative posts in junior colleges however still provided the bulk (40 percent) of those recruited to the presidencies. And over 20 percent came from administration in elementary and secondary education.

Roueche (1968) found roughly comparable percentages in his study. About half were recruited from the junior college field and about 16 percent came from senior colleges and universities. Roueche concluded that today's junior college president, compared with his predecessor of previous decades, is somewhat older, has attained a higher degree of education, more administrative experience in higher education, and specifically in junior college administration. He found almost 53 percent held masters' degrees and 44 percent held doctorates. Shgnnon (1962) found similar percentages of degrees, but stated that these levels represented little change since the 1950s.

The studies cited above suggest the likely backgrounds of current presidents, but they tell little about the recruitment process itself. The factor of ambition is generally ignored. So is the nominating process: the way a prospective candidate for a presidency comes to the attention of a board of control. The literature contains no information on the influence various elements of the junior college community have on the selection of the president. Are recommendations of faculty, or students, or former presidents, taken into account? Are future presidents likely to be groomed for the job in a lower administrative post in a college, or is lateral movement at the presidency level more common? If there are different routes to the presidency, is there any effect on the type of executive who emerges? Does one path tend to produce more innovative executives than another? These are the kinds of question so far largely neglected in the literature.

A second area of concern in the literature is the description of the role of the junior college president. As was suggested above, much of the material is horatory in tone. Gillie (1967) and Maddox (1965) presented papers on what the president should do, but offered no analysis of what he actually does do. The study by Shaanon (1962) cited above attempted to get at the latter question through a survey of 312 college presidents. They reported spending most of their time on staff, public relations, finances, and students in that order; and would prefer to spend their time on staff, curricular development, public relations, and students, in that order. The presidents surveyed tended to feel the most neglected areas in their jobs were (in order) alumni, legislation, students, and professional activities.

Morgan (1970) surveyed college presidents and their assistants and found faculty and finances to be the two major sources of pressure on the presidency. Graham (1965) attempted a more systematic study of what a president actually does. He pointed out that "except for broad generalities, there are few descriptive statements of what the president's job is...with few exceptions one might well read the entire literature on the subject and still be unaware of the specifics of the junior college president's job [p. 2]." Graham sought to determine the relative importance the president attached to the various aspects of his job, and whether there was a geographic or size of school differential in the performance of those aspects and the importance attached to them. The problem with his findings is that the statistical presentation of data disguises the fact that there is no interpretation. The description of patterns is meaningless without some attempt at interpretation or explanation. The result is that Graham concluded with questions which perhaps should have been his responsibility to answer.

A study by Scamm (1968) is another example of statistics employed in great complexity but to no apparent purpose. His basic finding was that board presidents, administrative deans, and faculty or senate presidents did not differ significantly from junior college presidents in their expectation of the latter's role. But the concern of the paper seems to have been almost entirely with the statistical tool, and marginally with the significance and implications of the findings.

The attention paid to the impact of change on the presidency reflects the debate in the literature, and in the field, about the correct priorities with which a junior college president should be concerned. Should he be an educational leader, devoted to improving the quality of education offered the students in his college; or should he be a professional administrator, more concerned with public relations and personnel? This debate, as was suggested above, is generally carried on at the normative level. A few studies have taken a perhaps more productive tack by assuming, either explicitly or implicitly, a goal and investigating factors that contribute to or inhibit it. For example, Ramstad (1966) studied the factors that were central to the adoption or non-adoption of experimental programs in junior colleges. Examples of the innovations he investigated were team teaching, variations in class size, use of teacher aides, language labs, and the use of television. He found that in all but the last case the personal attitude of the chief administrator toward innovation was the most significant variable. (In the case of the adoption of television, the availability of funds was the crucial variable.) Factors which did not prove to be influential included situational variables (lack of funds, space, support, trained staff) or environmental variables (enrollment, location, type of curriculum, and per student cost.) Chapter 8 presents a discussion of innovative programs.

Cohen and Roueche (1969) pursued the question of the innovative responsibility of the junior college president. Observing that the trend in much of the literature seemed to be towards a managerial definition of the president's role which assumed that educational leadership had been outdated by the complexities of modern organization, Cohen and Roueche argued that an important distinction between administrator and leader must be made. The former, they said, seeks to maintain the status quo. His main goals are the preservation of the organization and its efficient functioning. Leaders, on the other hand, are interested in change and innovation. Cohen and Roueche argued that changing conditions demand more leadership; but found in their survey that the typical American junior college president is neither assigned responsibility nor held accountable for educational leadership. (They have proposed that the president be held accountable to the board for improved learning and that such improvement should be demonstrated in his annual report to the board as a condition of his contract renewal.) Despite their finding

that the college president is generally not perceived as an educational leader, they concluded that the only hope for change must come from the president, largely because junior college faculties, they feel, are "fundamentally resistant to any change [Chap. 4]." This evaluation of faculties is frequently found in the literature on junior colleges; often without empirical substantiation. The role played by faculties in junior college decision-making; or perhaps more precisely, the role they seek to play, will be explored in the following section.

Faculty Participation

The trend towards increased participation by the faculty is one of the important changes affecting junior colleges. The question of such participation in decision-making raises questions of democratic values, efficiency in decision-making and administration, the role of conflict, and the problem of designing channels of participation. In the junior college literature the basic approach to these problems is to ascertain the degree of current participation by faculties and to determine the degree of desirable participation.

The tendency toward unsubstantiated normative statements in much literature on junior colleges is quite pronounced in the area of faculty participation. The lack of participation in junior colleges has been traced (Garrison, 1967) to the evolution of the junior college out of the publicly controlled secondary school system which does not have the traditional basis for faculty participation of the university. Junior college faculty members, he argued, expect to be treated as professionals, and may become militant if they do not receive such treatment. Wright (1968) related faculty discontent to the desire to participate in decision-making rather than any economic consideration. However, Roman (1968) reported in a study of the San Diego City College Academic Senate that resolutions concerning budget matters made up the most frequent category over a two and one-half year period. In addition, there was quite general satisfaction reported among the faculty with the actions of the Senate, combined with extremely low rates of actual participation.

Nevertheless, a plethora of articles argue, frequently without substantiation, that increased participation is the wave of the future in junior colleges. There is a tendency to transfer the experience of senior colleges and universities to junior colleges. (Lombardi, 1968, arrived at discouraging conclusions from the events at Berkeley and Columbia, but might have provided more linkage between those events and junior colleges.)

However, Riess (1970) provided evidence that there is interest in increased participation among faculty. In a survey of attitudes towards faculty participation among both faculty and administrators at California community colleges, he found the faculty perceiving less current participation than administrators, and recommending more. The only significant difference among faculty members on this issue was that the academic faculty recommended a higher degree of participation than did the applied or vocational faculty.

Malik (1968) in a study of nine community colleges in Oregon reported similar findings. He found that applied faculty consistently reported less participation and lower expectations for participation, and higher satisfaction with present levels of participation. The academic faculty in this study viewed present levels of participation as much lower than did administrators, and thought faculty participation should be markedly higher than did administrators. Malik's study suffers however from a lack of precision; he offers only a summary of the findings, no tables, no statistics.

The issue of faculty participation is something less than a debate since most writers argue for it. Their arguments however frequently rest on unexamined assumptions about democracy, about efficiency, and about the role of conflict in organizations. An article by Bartky (1957) is one of the few to take the position that democratic debate is undesirable in junior colleges. Bartky's argument, which he based on his experiences in the South Pacific in World War II rather than on educational examples, is that the goals of a junior college are clear and beyond debate:

Therefore, a junior college should approach its objectives in the manner of a well-trained battleship. Society has set its objectives and expects them to be attained. There is no place for debate that frustrates society's purposes.... The junior college...must not dissipate its efforts with too much consideration of the whims of a faculty and with tolerance toward those who would dilly dally with its socially defined purposes [p. 7].

Most writers have rejected Bartky's absolute distinction between junior colleges (which should be run like battleships) and universities (which he sees as non-directive arenas of debate). Also rejected, at least in some of the more sophisticated literature, has been the notion that debate and conflict are necessarily detrimental to the junior college, or to any organization.

The tendency now seems to be towards stressing the beneficial aspects of participation in decision-making, particularly by faculty. For the most part, the benefits are assumed to consist in increased efficiency. Little attention has been paid, except at the level of assumption, to the benefits to the individual which may result from democratic participation. (See for example Bachrach, The Theory of Democratic Elitism, 1967).

Capper and Gaddy (1969) argued for faculty involvement to keep undesirable conflict at a minimum and to lead instead to constructive debate. Collins (1967) argued the pragmatic values of faculty participation--diversity and debate over policy followed by willingness to bow to the majority. The type of participation envisioned by these writers obviously requires institutions through which it may be channeled. The recommended institutions are some form of committee system, and the academic or faculty senate.

Ashmore (1958) reported on a successful system of faculty participation. Drawing on his experience as president at Pensacola Junior College, Ashmore reported higher morale among faculty along with increased efficiency because of the involvement of faculty in decision-making through committees. The faculty gained a better understanding of administration policies, contributed their talents to the solution of problems, and left the president more time for planning and for contact with the public.

However, the committees described by Ashmore were largely concerned with administrative detail and routine. There was little policy-making role assigned to these committees. Future research might inquire into comparative study of morale and efficiency in colleges where the faculty participates in policy-making and those in which it performs routine administrative functions. Also, longitudinal research might examine the long-term effects of serving on each type of committee. Is there a difference in morale, for example, over the long haul between the two types of committees? That is, does morale diminish after substantial experience with routine committee assignments?

Another problem with the relatively scarce literature on committees as a channel for faculty participation is its almost entirely descriptive nature. There is a tendency to describe structures as they would appear on an organization chart; to list the functions they should ideally perform. But frequently there is no evaluation of performance. An example is the report on "Standing Committee Structure," from the College of the Mainland, Texas City, Texas (June 5, 1968) which was published as a suggested guideline for other administrations.

The other major channel of faculty participation considered in the junior college literature is the faculty senate. Several writers have pointed to the senate as the best institutional method of participation by faculty. However, actual studies of the functioning of senates have been scarce. The study by Roman (1968) mentioned above is one example. Another is Bandley's survey (1967) of 68 junior colleges in California. After studying the number and type of resolutions passed Bandley concluded that the senates

...have made the greatest number of recommendations to their administration and boards of trustees primarily in areas which materially affect their personal lives and working condition, that is, in salary, personnel matters...class size, and work load policies. Secondly they have helped themselves and the students on improvement in instructional policy and academic freedom and controversial issues policy. They have done little and seem to show only a low priority interest in student problems pertaining to articulation and transfer, improving vocational educational programs, and in seeking ways to help the less academic inclined students [p. 9].

Despite the abundance of articles on faculty participation, there has still been relatively little research on several important aspects of the issue. So far there has been scant attention paid to various faculty organizations, unions, pressure groups, and to their impact as they become more organized and powerful. Neither has there been much research into the causes of conflict involving faculty members. Weber (1967) reported results of a survey attempting to discover the causes of faculty demands at 34 junior and state colleges and universities. He found such causes to include tensions between faculty and administration regarding faculty power, professionalism,

levels of bureaucracy, and loss of authority. Such findings suggest general patterns of causes at all types of institutions of higher learning, but do not deal with the possibility that the salience of particular causes varies depending on the size and status of an institution.

Another question important to the discussion of faculty participation concerns a more precise definition of the differences in attitudes and perceptions between faculty and administrators. As indicated above, much of the literature starts from the assumption that the faculty is generally conservative and resistant to change while the administration tends to be more open to innovation. This is the basis on which leadership is frequently expected from the president rather than the faculty of the junior colleges. Lombardi (1968) made the distinction that faculty tend to be educational conservatives and social and political liberals, whereas administrators lean toward educational liberalism and social and political conservatism. He might have enhanced his position, however, by including supporting data. There is a problem in speaking of either faculty or administrators as a homogenous group. Among the faculty for example, it is entirely possible that political and social differences might distinguish teachers in the liberal arts from those in vocational areas. What is more interesting, in the context of the junior colleges, is the relevance of such differences in terms of education. If differences do exist between faculty and administrators, what are the consequences for their reactions to the pressures of change? If the faculty are as educationally conservative as they are often reputed to be, from whence comes the pressure for increased faculty participation in the administration of the colleges?

Summary and Conclusions

A survey of the literature in any field highlights those problems that appear to be most salient at a given time. In the administration of junior colleges, the literature suggests problems in each of the four areas covered in this review.

Literature dealing with types of organization and control focuses almost exclusively on the problems of organizing structures to accommodate the pressures of rapid growth. The central question is what kind of organizational

pattern can be applied to the process of expansion with the highest resulting efficiency. There is a convergence of opinion in the literature that a junior college is best controlled by an independent board, but there is little empirical, comparative research to buttress this argument. Likewise, there is a dearth of empirical information on the respective merits and demerits of various ways of organizing the expansion of junior colleges whether through multi-branch, multi-college, or multi-program structures.

The literature dealing with boards of control deals largely with two broad questions: the problem of determining the boundaries of responsibility and effective action of the board; and the impact upon board policy and decisions of the social, economic, and educational background of its members. Opinion in the literature tends to converge around the position that the board should not interfere with academic matters and should provide for fairly open participation in policy and decision-making by various segments of the campus community. But again there is little empirical work done on the degree to which this is encouraged or obstructed by various types of boards. Similarly, much more research could be done on the processes of recruitment to board membership, and on the significance of background variables in terms of types of behavior.

The literature on the junior college president also deals largely with two questions: the changing nature of the president's job, and the process of recruitment to that position. The first question is usually treated in a normative fashion, arguing that pressures for change demand flexibility and managerial ability, but that educational leadership is still a necessary quality. The few studies that have been done seem to agree on the central role of the junior college president in any implementation of innovation. More empirical work exists on the question of presidential recruitment, but it is largely restricted to background factors rather than actual recruitment. One possible area of future research might be relating variables in the recruitment process to attitudes towards change and innovation.

Finally, the literature on faculty participation consists in large part of exhortations for more of it, coupled with infrequent empirical studies which attempt to draw distinctions among the types of issues on which there is pressure for increased participation, and among the various faculty groups,

some of whom are held to seek more participation than others.

Overall, it might be said that the bulk of the literature on administration is concerned with problems of participation and authority, with drawing the boundaries of authoritative action by various groups connected with the junior college. This concern is related to the pressures for change currently affecting the junior college, pressures which also affect the existing boundaries of authority. These pressures, based in part on an incongruence between the concern for change and involvement in planning for change (Tillery, 1970), are obvious sources of conflict.

What is generally lacking in the literature is an attempt to encompass these problems in a theoretical framework. This lack contributes to a situation in which the discussion of junior college problems is carried on at the level of untested assumptions and normative statements. This is not to argue that there is no place for normative statements. Their purpose is to assist in defining goals. But analysis of problems and evaluation of proposed solutions must move beyond the normative level for progress to occur. One way in which this might be attempted would be to view the junior college in theoretical terms as an institution or organization affected by and reacting to a changing environment.

A standard theoretical frame of reference for the sociology of organizations has been functional theory (Blau, 1955; Merton, 1957; Parsons, 1960). This perspective views organizations as systems consisting of a recognizable structure the components of which function in some purposeful manner. Furthermore, "functions" of the system can be identified and measured in terms of the consequences resulting therefrom. Merton (1957) suggested that when functionalism is defined in terms of consequences, two forms of functions can usually be observed: "manifest functions" by which purposeful activity results in premeditated or intended consequences and "latent functions" by which activities, in the process of accomplishing intended purposes, also result in unintended "spin-off" consequences. Burton Clark's discussion of the "cooling-out function" (1960) performed by community-junior colleges is an excellent example of the very real impact that latent functions can have on the outcomes of institutions.

A fundamental theoretical problem of functional theory when applied to the study of human institutions has been the need to invoke teleological reasoning -- the imputation of purpose to a network of human relationships by the observer and not by the participants in order to describe or explain collective behavior in functional terms. This concern has particularly entered in when anthropologists and sociologists have attempted to understand human institutions having no formal charter of purpose such as kinship structures, elaborated rituals and taboos, divisions of labor, and so on (Radcliffe-Brown, 1935, 1965; Durkheim, 1964). Unlike these kinds of institutions, however, formal organizations such as educational institutions do have specified purposes and their structures are tailored especially to meet these purposes, hence circumventing the teleological problem.

As community or junior colleges appear to have a well defined purposeful role relative to other institutions of higher education functional theory should be useful as a framework for empirical research on administrative/organizational problems. Functional theory, with its concepts of manifest and latent functions and its capacity for analyzing change within purposeful organizational structures (Blau, 1955), would seem to be appropriate to the study of the role and effects of Boards of Trustees acting as both protector of the community's educational interests as well as supporters of the program goals and strategies of the colleges' professional staffs; of the changing role and function of the community-junior college president; of the manifest and latent consequences of greater participation by students and faculty in previously restricted policy making functions.

Functionalism is not the only theoretical approach that may be applied to the study of junior college administration. Blocker, Plummer, and Richardson (1965) attempted to view administration by contrasting a rational system model and a natural system model. Their chief point, which is similar to the concept of manifest and latent functions in functionalism, was that the rational model conceives of organization solely as an instrument for the pursuit of a specific end whereas the natural system model regards organization as a system in which the realization of the goals of the system is only one of several important needs. Administration, they conclude, may be defined as the direction and coordination of these two components.

Functionalism, or alternative theoretical frameworks, should be considered for the coherence they might lend to the study of junior college administration. Hopefully, the use of theory would increase the sophistication of much of the literature on junior colleges in several ways: by providing organizational categories which would help pinpoint both gaps and redundancies; by encouraging the formulation of theoretical, i.e., hypothetical, statements, thereby stimulating empirical testing; and by developing the ability of generalization which would emphasize trends and patterns rather than anomalies in administration. Such steps should go far in eliminating several of the shortcomings in the literature discussed previously.

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CHAPTER 12

DEFINING COMMUNITY NEEDS

Janet Hoel

Introduction

The junior college, often called the community college, is involved in an exchange relationship with the community it serves. The college provides community services to foster financial and popular support from the community and hopefully to aid community development. That the community college is in a unique position to fulfill this role is asserted by most community college educators. As Harlacker (1969) argued, "Rooted in the soil of the district community it serves and drawing its students and strength from that community, the community college is particularly suited as a community service agency [p.7]."

However, while the community college may be particularly suited to fulfill this function, it is not clear how successful it is. The relationship between the college and the community is problematic; it raises many questions, as noted by Cohen and Quimby (1970):

- (1) Has the establishment of two-year colleges outside of urban areas stemmed, accelerated, or left unaffected the tide of young people moving to urban centers?
- (2) How are parent community economic systems affected by the presence of junior colleges?
- (3) Does local tax support of public junior colleges syphon off funds that would otherwise be invested in elementary and secondary schooling or other social agencies?
- and (4) Has the presence of junior colleges led employers to up-grade educational qualifications for entry-level employment? [p.7]

As yet, the existing literature has not provided satisfactory answers to these questions.

This chapter will review the existing literature on community services and college/community interaction in two broad categories. The first deals with the community service function of the college and the service programs developed by the college. The second part focuses on the community and its relationship to the college.

Community Service

The community service program of a community college is, at least in theory, an integral part of the total institutional program. Indeed, community service is commonly included as one of the five primary purposes

of the junior college, along with "preparation for advanced study (transfer), terminal or vocational education, general education, and adult education . . . [Harlacker, 1965, 39]."

While there is not total agreement on the definition of community services, Harlacker (1965) defined community services as: "educational, cultural, and recreational services which an educational institution may provide for its community above and beyond regularly scheduled day and evening classes [p.16]." Medsker (1960) suggested the potential breadth of community service programs:

Community services has come to denote generally the various special services which an educational institution may provide for the community. Examples of such services are work-shops, forums, and institutes; research and advisory assistance to community groups; cultural and recreational activities, including community musical and theatre groups and widespread use of the college plant for community activities [p.78].

Despite this potential, however, a consideration of the literature suggests that the basic problem with community service activities is the low priority they are assigned. As for the literature itself, the basic problem is that it provides little evaluation of the performance of the community service function. Much of the general literature on community services is taxonomic. The descriptive thrust of this literature has resulted in a surfeit of program descriptions, but little program analysis and evaluation. (This lack of evaluative information was also found in chapters 6, 7, 8, and 9.)

An outline of the components of community service programs was offered by Reynolds (in Henry, 1956). He listed the following types of community services:

1. mutual aid for meeting college-community needs
2. community experience programs
3. community study-research programs
4. specialized community services
 - a. economic conditions
 - b. public education
 - c. health
 - d. cultural and recreational activities
 - e. conservation
5. public affairs education
6. community development
7. community participation and leadership training

8. use of mass-media of communications
9. community use of school plant
10. formal adult education programs [p.1440]

Community service programs have also been categorized by Harlacker. The following classificatory taxonomy was ranked on the basis of response frequency in Harlacker's study (1964) of all of the 71 public junior colleges in California:

1. Community use of college facilities
2. Cultural programs
3. Campus conferences and meetings
4. Public affairs lectures and forums
5. Public information
6. Speakers bureau
7. Educational workshops, seminars, lectures for business, industry, and professions
8. Special services for the community such as library, guidance, planetarium, museum, art gallery, and radio-television
9. Campus special events
10. Community recreation programs
11. Campus tours
12. Alumni association
13. Utilization of community resources in instruction
14. College box office
15. Community research and development
16. Adult education classes (nongraded)

The most comprehensive description of community service programs was reported in Harlacker's The Community Dimension of the Community College (1969). This book was primarily based on Harlacker's visits to 37 community colleges in 1967 and on correspondence with administrators from 28 additional college districts. Harlacker organized his field reports around four objectives of community service programs: community use of college facilities and services; community educational services; community development; and cultural and recreational activities.

Within the field of community use of college facilities, Harlacker noted uses of physical facilities, co-sponsorship of community events on campus, and initiation of library service for community residents. In the area of community educational services, Harlacker listed programs in six categories: non-credit short courses, college-credit extension courses, inservice training, community counseling, human resource development, and campus radio-TV stations. Community

development programs were broken down into studies, polls and surveys; leadership and advisory assistance; workshops, institutes and conferences; and organization of community councils and other community groups. In the last area, cultural and recreational activities, Harlacker cited field projects pertaining to arts, lectures and film series, cultural tours and field trips, galleries, physical activities, community science services, festivals, and community performing groups.

In addition to the examples of community service programs offered by Harlacker and others, a variety of institutional and advisory reports and program surveys have been published. The Mott Graduate Training Program (1966) reported that awareness of community needs was widely recognized. Of the schools responding to this survey (53 percent of the 375 colleges and universities polled), over 60 percent agreed that community development was a responsibility of their institution. About 10 percent of the responding schools were community colleges. In spite of this perceived responsibility, only 19 percent had special community development or community service departments. The report noted that of their samples, the junior college displayed most initiative in community development, although the type of initiative and the success of such programs was not discussed.

Another study comparing community service programs between four-year and two-year colleges was reported by Myran (1971) in "Community Service Perceptions of the National Council on Community Services." This questionnaire study included two-thirds of the 300 members of the National Council on Community Services and 100 educators from Michigan State University.

Myran gave the participants a series of attitude positions and reported the response frequency distribution for each item. Over 70 percent of the junior college respondents strongly agreed that the college should be actively engaged in solving contemporary social problems; 88 percent of the Michigan State University participants also strongly agreed. There was a distinct split between the Michigan State and the junior college respondents over the statement: "Community colleges would probably better serve the needs of the most socially disadvantaged students than four year colleges and universities." Over 72 percent of the junior college members felt that the junior college was better, while only 29 percent of the Michigan State respondents agreed. Nevertheless, in response to the

statement: "Community service programs in the community college should serve primarily the socially disadvantaged," over 54 percent of the junior college members disagreed. (Over three-fourths of them agreed that "The community service program is heavily influenced by the interests of business and industry.") It would seem that junior college personnel feel their institutions are qualified to handle community problems in the abstract, but there remains a question as to the extent of their involvement in concrete programs.

Myran concluded his study with the report of the Council on the most important elements in community services programs. The Council noted four elements: cooperation with other community and educational agencies, service to adults, service to the disadvantaged, and service to community groups.

A recent study of actual community service programs in California community colleges was made by Keim (1969). Keim surveyed 62 colleges in 51 districts and reported substantial growth in all areas of community services as indicated by the following findings for the participating colleges:

1. An increase of 22.6 percent in the number of chief administrative officers assigned to community services from 1966-1970.
2. An increase of 111.8 percent reported in the number of colleges engaged in activities which sought a solution to community problems.
3. An increase of 140 percent in the use of community surveys.
4. An increase of 88 percent in the number of colleges which used citizen advisory committees.
5. An increase of 825 percent in the use of community services ethnic advisory committees.

These levels of increased community services indicate the low level of service programs before 1965 as well as the increase since that time. While Keim found more community services programs devoted to community development, this type of involvement was of low priority for most colleges. Keim noted, "Community research and development or community involvement, while showing an increase over the four years, remained in fourth place in time, budget, and general emphasis [p. 235]." Thus it appears from Keim's survey that

community colleges tend to develop community service programs along well established, traditional lines rather than creating new community roles and functions for the college.

Keim also noted that the development of community service programs has particularly prospered in California. The tax override monies provide specifically for such programs. In light of this special funding, Keim found that very few junior colleges used federal funds, or foundation funds. Nor was state aid widely reported. The lack of federal funding is significant considering the variety of poverty, manpower training, and other federal projects in which the junior college could participate.

Although the tax override has provided California schools with adequate resources for community service programs, Keim found that this money was often diverted from these programs. Increase in tax rates has not resulted in substantial increases in programing. A significant portion of these funds is not being spent by the colleges in conformity with program requirement as outlined by the Western States Association of Schools and Colleges Accreditation Commission. Keim (1969) found that "More than one-third of the money collected in 1969-1970 was . . . used in some manner other than direct support of these functions of community services [p. 24]."

The problem of funding was also studied by Harlacker (1969). He reported that Maryland, Michigan, New York, and Ohio had used funds from Title I of the Higher Education Act of 1965. Other states, notably Illinois and California, report that community colleges have difficulty competing with four-year colleges and universities for these funds which are earmarked for community services (Harlacker, 1969).

For colleges receiving little Federal, State or local financial support, community service programs must be self-supporting. This financial burden tends to limit the development of new, experimental programs. Free programs must also be curtailed as the declining economy places more restraints on educational budgets.

Of all forms of higher education, junior colleges may be the most financially solvent. The junior college has had a variety of tax monies to use in community service programs. Besides the tax override, other "restricted funds" taxes may be used for occupational training, adult education,

and community programs. Although these taxes are most prevalent in California, they are being employed in many other states. But even if these special monies were not available, the community service function still remains a low priority for many junior colleges. As Harlacker (1969) reported, none of the financial restrictions would hinder program development "if community services were considered a major function of the community college [p. 65]."

As previously indicated, the literature on community services is deficient in analysis and evaluation. The research in this area suffers from conceptual as well as methodological limitations. The categories and types of community service programs and examples of individual programs have been established and documented, but the research has not yet gone beyond descriptive reporting. Seldom have community service programs been evaluated and analyzed in terms of effectiveness.

One of the few community studies that includes substantial evaluation is found in a report on the Peralta Colleges Inner-City Project (Elsner, 1970). This project, sponsored by the Office of Economic Opportunity and the American Association of Junior Colleges, was to be "part of a nationwide program to test the capability of two-year community colleges to develop programs to meet the needs and problems of the inner-city poor [p.4]." The project had four basic elements:

1. A student service corps to carry on a work-study service program of community outreach development and service in the inner-city itself.
2. Community Development Centers to provide educational and counseling services in the inner-city. The Centers would also serve as a focal point for workshops and other programs to be initiated in a later phase of the project. They would also facilitate the supervision and administration of the activities of the student service corps.
3. An enrichment program to provide workshops in art, music, and drama to be supplemented by recreational, social, cultural, and educational experiences at block, neighborhood and community levels.
4. A scholarship system project to provide financial assistance in the inner-city for those who wish to attend college to prepare themselves for careers in public service.

The report itself addressed a series of questions which were used to evaluate the total project. These questions assessed the strength and weaknesses of the Inner-City Project and provided a model for other junior colleges that needed an evaluative model. In terms of the Peralta project itself, the study reported the following evaluation:

. . . It is recognized that the original proposal may have been too open-ended and fails to permit, for example, an adequate appraisal of effects on the self-concept of the target area beneficiaries. The Project . . . may have been too rigid in asking the two colleges, each with its own style, to mount identical formats. Perhaps the richest and hardest lessons were that community action must be truly "community" based to succeed -- the styles of the people served by the institution must be reconciled and they must prevail. To bind a program to the hopes and attributes of its originators may only invite failure.

This report and the program itself is recommended for all junior college community service programs. It included vital information on the problems of community involvement. It demonstrated the necessity for flexibility on the part of the junior college and pointed to the stresses that will result in community development programs. Most importantly, this report emphasized evaluation, the most underdeveloped aspect of community/college interaction literature.

The general lack of evaluation may well stem from institutional hesitation to initiate self-evaluation. Community surveys to evaluate community service programs are difficult to conduct, costly, and time consuming; most junior colleges lack the staff expertise to conduct a good study. Also many in community service administration are not research oriented. But the problem is larger than institutional reluctance. There has been research devoted to the study of community service programs. But the research reveals little more than program categorization or program ideas. No comparative studies have yet been done to evaluate the effectiveness of various community service programs in different communities. Many questions remain: What programs are most effective in meeting the needs of the disadvantaged and the community in general? What programs do not work, and why don't they work? How are financial goals met in developing the program? Who benefits from such

programs? If any improvement is to come in community services, research must be directed at such questions. Without this kind of research, the descriptive studies are of little value.

Community and College Interaction

If one important aspect of an effective community services program requires sophisticated evaluation and analysis of the program, another equally important need is for well-grounded knowledge of the community toward which that program is directed. In a recent paper, Shaw and Cummisky (1970) agreed that "a college must know its community if it is to provide comprehensive programs and services that will meet the multiple needs of today's complex and interrelated society [p.19]." Such knowledge must spring from careful study of the community with certain questions in mind: What is the impact of the community environment upon the college? What kinds of programs are needed by the community? What kind of support, primarily financial, exists in the community for the initiation and continuance of service programs?

As in the case of community service research, the literature on community/college interaction and on community attitudes toward the college is primarily descriptive in nature. While the need to "know the community" is often stressed, the methods, programs, and purposes for this activity are seldom analyzed or evaluated.

In the field of community/college interaction, one study, reported by Hendrix (1969), attempted to analyze systematically the impact of various community environments on the junior college. A series of seven canonical and regression analyses were made to estimate relationships among college environments (as assessed by the attitudes of the faculty and the students) and community characteristics. One of the objectives of the study was "to discover the relationships between community characteristics, external determinants and certain output criteria. It was hypothesized that certain community characteristics would influence the college both by the input of certain types of students and by exerting pressures on the college to establish certain educational programs, modes of operation, and objectives. This community influence would be reflected in the student outputs." This report includes an impressive array of statistical manipulations, but the substantive benefits of the study might have been more completely projected.

Further testing of the hypothesis, refinement of the measurements, and more developed discussion of the findings and conclusions should enhance the efforts put into this study.

As for determining support in the community for college programs, the most common studies in this area are institutional reports on feasibility studies for new programs or even for new schools. Many schools have found it advantageous to conduct community surveys or involve community leaders in planning for college development.

One example of the effective use of community surveys is a study for the West Valley Junior College in California (Roper, 1968). A random sample of 750 adults (stratified by age, sex, and employment status) was surveyed to determine community attitudes toward the importance of a college education for high school graduates in the district, college plans for their children, attitudes and knowledge about the college, and voting intentions on a future school bond issue. The study found that: 1) chances of a bond issue passing were excellent if a campaign was well-mounted; 2) 75 percent of those voting favored the issue; 3) an immediate election was not recommended as those opposed to the issue were more certain of their intention than those in favor; 4) an educational campaign before the election would be beneficial as those familiar with the college were much more likely to favor the issue. As a result of this study, the college was able to assess its chances for community support and to develop a campaign accordingly.

Another example of a feasibility study can be found in "A Junior College Proposal for Boone and Winnebago Counties, Joint Report of the Northern Illinois Junior College Committee and Northern Illinois University" (Sechler, 1964). This study covered interviews with community leaders to determine the need for a junior college. The report described the research design employed to measure the economic, educational, and financial factors that would influence the development of Rock Valley College in Rockford, Illinois.

Community involvement in college planning was also used in New York. A professional consulting firm, Caddell, Rowlett, and Scott, conducted a series of seminars to determine the community needs before planning the junior college. The idea behind this study, "A Report on Six Seminars to Assist in Planning a High Rise, High Density, Urban Campus for Manhattan Community College" was to

make Manhattan a truly community college.

If the junior college is to respond to community needs, it must have an effective way of determining community attitudes. Studies of high school seniors, business leaders, or university educators may offer valuable suggestions for the college, but such studies cannot pretend to represent "the community's needs." In spite of this obvious observation, the literature on community attitudes contains little true community measurements. Howard Rawlinson's (1963) study, "Public Junior Colleges and Community Needs: Development and Application of Evaluative Criteria," attempted to "devise an evaluation schedule for assessing how well a community college serves its community." Yet in developing this schedule, Rawlinson studied only 100 pair groupings of administrators and teachers. No survey of community members was included in this evaluation.

To assess community attitudes on higher education in Kansas City, a comprehensive survey was conducted in 1957 (McHenry, Hayes & Kelley). This survey provides an excellent example of the use of community analysis to direct the future development of the higher education in a growing city. The project gave careful consideration to all forms of higher education in the area. The junior college was evaluated in the context of community needs and community resources. Problems of institutional competition, tax support, and institutional articulation were also considered.

A similar metropolitan educational analysis was conducted in St. Louis by the Junior College District (Sobel, 1968). Under a grant from the Carnegie Corporation Foundation, Washington University interviewed students, parents, faculty, and counselors to give the District a socioeconomic profile of the community clientele. The purpose of this study was to enable the college to plan programs sensitive to the economic conditions of the students and the community. Although no program evaluation is provided in the report, it is clear that before a junior college can attempt to develop sensitive programs, community analysis such as the St. Louis and the Kansas City studies must be completed.

Community analysis and the study of community attitudes is clearly a vital task for the junior college. The problems with most college efforts to analyze their communities are lack of methodological sophistication and a restricted study focus. The limited research focus in many community studies refers to the previously mentioned problem: too little community research on community

attitudes. There has not been enough concentrated effort put to the general analysis of community characteristics or community attitudes.

One reason for these restrictions may lie in the cost of extensive sampling and the time and effort such research involves. Many attempted community studies suffer from a lack of methodological sophistication. Few articles in the junior college literature address this problem of the need for care in survey research. As Welch (1965) suggested "Accurate assessment of community opinion and reaction depends upon adequate sampling techniques [p.1]." Welch suggested using voter registration lists as a source for random sample selection, even though this method might exclude the disadvantaged, who are less likely to be registered voters. Time, money, and the research design must also be considered in the determination of community survey research.

If a junior college decides to plan a community study, a variety of reference material will be helpful. A number of general studies on the social and economic characteristics of American cities are available; these include city and county data books and the recent census data. Especially helpful for the junior college is the booklet, Census Use Study: Data Uses in School Administration (Bureau of the Census, 1970). Another useful compendium is Hadan and Borgatta's Social Characteristics of American Cities (1964). Both of these reference sources provide the college with relevant information on their community's income, educational levels, population characteristics, average age, and size of the college age population. The 1970 Census Data will also provide additional data: 1) number of people enrolled in public schools or receiving nonpublic education; 2) number of persons in post-secondary institutions; 3) number of persons, aged 16-20, in the military service, working full-time, part-time, and unemployed; and number of these persons who are high school graduates. The 1970 Census also included questions covering vocational education and the main areas of vocational training.

In addition to general use of the demographic and socio-economic data, the junior college may also use the Census reports as a benchmark for data collected by the college district. The census data provide an objective standard against which local surveys may be verified. The Census data will also be used in establishing statistical relationships.

The junior college may also be able to use the many specific city case-studies found in the literature of urban politics. Extensive research has been done on most large metropolitan areas and certain longitudinal analyses could be of special help in junior college planning. The junior college administration also might profit from investigations of community decision-making analysis. Since most junior colleges are dependent on local support for their existence, a knowledge of the dynamics of the decision-making and financial-distribution processes would facilitate the colleges' strategies for maintaining or increasing support. Examples of research in this area are Floyd Hunter's Community Power Structure: A Study of Decision Makers (1955), or Banfield's Big City Politics (1966).

Another related body of literature is found in community/university involvement research. Although this literature was developed in the late 1960's, it has been slowly declining in interest. One example of work in this field, the proceedings of the Community Service Workshops at the University of Chicago, has been published as The People vs. The System: A Dialogue in Urban Conflict (Tax, 1968). These workshop programs, held at many universities, usually included suggestions for community related programs and methods of community analysis. The junior college might profit from a comparison of its programs with those of universities in this area.

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